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The Tailoring Rule: Exemplifying the Vital Role of Regulatory Agencies in Environmental Protection

Meredith Wilensky*

On May 13, 2010, the Environmental Protection Agency issued the Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule. Known as the Tailoring Rule, this regulation makes key adjustments to the statutory thresholds for permitting requirements in order to finally bring stationary sources of greenhouse gas emissions under federal regulation.

This Note argues that the Tailoring Rule demonstrates how agencies serve a critical function in the context of public policy. Where the inherent characteristics of "wicked problems" like climate change prevent Congress from passing legislation, delegation to agencies provides renewed potential for government action that reflects the public interest. The classic advantages of administrative power, such as insulation, flexibility, and expertise, are particularly important in the context of "wicked problems" in two ways. First, delegation to agencies can ensure action where politics would otherwise prevent new legislation. Second, it can ensure that the public interest is prioritized over economic interests, providing more effective regulation.

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INTRODUCTION

Today agency decision-making impacts almost every aspect of our lives, from the quality of the air we breathe, to what appears on food labels, to whether we have to take off our shoes for a security check at the airport. Over time, the legislature has increasingly delegated to regulatory agencies. The present state of administrative agencies is controversial. On one hand, there are fears that present delegation to agencies violates constitutional separation of powers principles intended to safeguard against tyrannical government. On the other hand, there are advantages, such as expertise and insulation from politics, which are increasingly important in a time of complex technology and political polarization. On May 13, 2010, the Environmental Protection Agency (EPA) issued the Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule), which establishes permitting

1. See RICHARD J. PIERCE, JR. ADMINISTRATIVE LAW TREATISE 8 (5th ed. 2010).
3. See Lawson, supra note 1.
4. See THE FEDERALIST NO. 47 (James Madison).
6. See Froomkin, supra note 2, at 797.
regulations for stationary sources of greenhouse gases (GHG) under the Clean Air Act (CAA). The passage of the Tailoring Rule is exemplary of present agency power. Because GHGs are characteristically different than other pollutants, developing effective GHG regulation has required the EPA to exercise significant discretion in interpreting the CAA. The Tailoring Rule "tailors" the GHG emissions levels that trigger permitting requirements in order to exclude certain sources of GHG emissions from regulation.

The EPA maintains that tailoring is necessary in order to effectively regulate GHGs, which are emitted in much greater quantities than other pollutants. Without the Tailoring Rule, emissions levels triggering permit requirements would require a huge expansion of the permitting program to include sources that emit relatively small quantities of GHGs. This would result in a heavy burden for small sources and permitting agencies, jeopardizing the effectiveness of the program. The EPA relieves these burdens by phasing sources into the permitting program over time, starting with the largest emitters. The Rule presently establishes the first two steps of a phase-in approach and promises to follow up with further research and action.

The EPA asserts that it has the authority to exercise the discretion found in the Tailoring Rule based on statutory interpretation doctrine, which provides a highly deferential standard of review for agency interpretations of their governing statutes.

The EPA maintains that absent the Tailoring Rule, small sources and permitting agencies would be overburdened, causing delays in permitting and

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8. The CAA defines stationary source as "any building, structure, facility, or installation which emits or may emit any air pollutant." 42 U.S.C § 7411(a)(3) (2010).


11. See generally Tailoring Rule, supra note 9.


13. See id.

14. See id.

15. See id. at 31,516.

16. See id. at 31,516.

17. See discussion infra Part.II.E; see also Tailoring Rule, supra note 9, at 31,533. See Chevron U.S.A. Inc. v. Natural Res. Def. Council, 467 U.S. 837, 843–44 (1984) ("We have long recognized that considerable weight should be accorded to an executive department’s construction of a statutory scheme it is entrusted to administer, and the principle of deference to administrative interpretations has been consistently followed by this Court whenever decision as to the meaning or reach of a statute has involved reconciling conflicting policies, and a full understanding of the force of the statutory policy in the given situation has depended upon more than ordinary knowledge respecting the matters subjected to agency regulations.")
making the program ineffective. Additionally, costs for permit applications could be cost-prohibitive for small sources. These results would run counter to congressional intent of the CAA, thereby justifying the EPA’s phase-in approach of the Tailoring Rule.

This Note does not attempt to answer whether the Tailoring Rule will withstand judicial review, a question the D.C. Circuit is in the process of answering. Instead, it will demonstrate how the Tailoring Rule exemplifies the critical function that agencies serve in the context of public policy. Because politics disproportionately favor action that is shortsighted and backed by powerful economic interests, the legislation development process disfavors certain types of policies that are good for the public. Delegation to agencies provides improved potential for effective policy that protects public welfare. Insulated from politics and pressure to finance election campaigns, agencies provide an important means to ensure that critical issues are addressed by experts concerned with public interest and not just reelection. The Tailoring Rule is consistent with these advantages because it provides for regulation where the likely alternative is no action or less effective action. Thus, the Tailoring Rule demonstrates the importance of delegation to agencies in the context of environment protection.

I. BACKGROUND AND CONTEXT FOR THE TAILORING RULE

A. Greenhouse Gases and Climate Change

Climate change is the process by which human activities are driving warming of the climate system. The climate is a complex system governed by internal and external forces. Variations in these forces have caused the earth’s climate to change many times in the earth’s history. One factor responsible for the relatively warm climate the earth is currently experiencing is the presence of greenhouse gases (GHGs) in the atmosphere. GHGs prevent heat from escaping into space through a natural process called the greenhouse

23. See id.
effect. While GHGs are naturally occurring, anthropogenic emissions of GHGs have substantially increased in the past century, primarily through the burning of fossil fuels. A primary GHG is carbon dioxide (CO₂), which is a necessary byproduct of combustion. Since pre-industrial times, GHG emissions have increased 70 percent, resulting in a subsequent increase in atmospheric concentrations of GHGs and causing more heat to be trapped in the atmosphere.

Because of the complexity of the climate system, climate change does not simply imply warmer weather. Direct results also include higher incidences of extreme weather such as droughts, heavy precipitation, heat waves, tropical cyclones, and sea level rise. Indirect results range from increased spread of vector-borne diseases to decreased food security and displacement of coastal communities. Today, the United States, home to only 5 percent of the world’s population, is responsible for 21 percent of the world’s carbon emissions yet Congress has failed to pass any comprehensive climate legislation.

Uncertainty surrounding the exact effects of increased GHG emissions on the climate system is often used as an excuse to prevent regulation. However, climate change is not a new issue. Scientists discovered the process in the nineteenth century, and Congress first passed related legislation in the 1970s. Nor is it some obscure concept looming in the future. Scientists have

26. See id.
27. See id.
31. See id.
32. A vector-borne disease is one in which an organism, such as a mosquito, transmits infection from one host to another. Malaria is an example of a vector-borne disease. See Changes in the Incidence of Vector-borne Diseases Attributable to Climate Change, CTR. FOR INT’L EARTH SCI. INFO. NETWORK, http://www.ciesin.columbia.edu/TG/HH/veclev2.html (last visited Mar. 22, 2011).
34. See, e.g., American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009); see also discussion infra Part.III.A.
37. See National Climate Program Act, Pub. L. No. 95-367, 92 Stat. 561 (1978); see also Massachusetts v. EPA, 549 U.S. at 307–08 (stating that the National Climate Program Act “required the President to establish a program to ‘assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications’”’).
already begun to observe increases in extreme weather incidents across the planet. In fact, some coastal communities are already experiencing property loss due to sea level rise. Moreover, impacts of climate change are expected to continue to increase. Even conservative estimates predict future effects to be significant and disruptive.

Another reason that climate change regulation has been delayed is that GHGs are characteristically different from other pollutants. First, GHGs are not inherently dangerous. Greenhouse gases are not only natural in the atmosphere, but are also responsible for the warm climate we enjoy today. It is the anthropogenic GHG emissions that disrupt natural climate cycles, thereby resulting in harm to humans and the environment.

Another obstacle to regulation is that once emitted, GHGs can remain in the atmosphere for up to thousands of years. This means that today's emissions will not just affect the climate system tomorrow, but will continue to trap heat in the earth's atmosphere for generations to come. Finally, unlike most pollutants, GHGs are global. In other words, GHGs do not stay where they are emitted, but maintain uniform concentrations across the planet. Consequently, GHGs from any source will affect the entire climate system. To make matters worse, changing the climate system does not affect all regions equally. Some regions will experience significantly more drastic effects from climate change than others.

B. CAA Construction and Consequences

Atmospheric pollutants have traditionally been regulated by the Clean Air Act (CAA). The CAA is a complex statute, organizing regulation by type of source and type of regulation. Sources of pollutants are separated into mobile

40. See id.
41. See Richardson et al., supra note 10, at 90.
43. See id.
46. See id.
47. See Richardson et al., supra note 10, at 13.
sources (vehicles) and stationary sources (such as power plants). Regulation of stationary sources is separated into technology-based standards, which require certain types of emission control technology, and emissions-based standards, which provide maximum atmospheric concentrations of pollutants based on levels necessary to protect public health. Sections 108 and 109 provide for the Act’s primary emissions-based standards, the National Ambient Air Quality Standards (NAAQS). Once the EPA sets NAAQS, the states are required to develop state implementation plans (SIPs) to achieve and maintain the standard, and these plans must receive the EPA’s approval. The primary provision for technology standards is section 111: New Source Performance Standards (NSPS). NSPS requires “new and modified major sources” to obtain permits, mandating technological standards.

The CAA is designed such that regulation under one provision will likely trigger regulation under another provision. Many provisions, including NAAQS and NSPS, require the EPA to first make an “endangerment finding” that the chemical or group of chemicals is a “pollutant” as defined within that provision. In some provisions, a finding of endangerment requires the EPA to regulate the chemical in question. For example, section 202 states, “the Administrator shall by regulation prescribe standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” Endangerment finding requirements are only slightly different for each section. As a result, an endangerment finding under one provision creates a “presumption of endangerment” for another. Other provisions, like the Prevention of Significant Deterioration (PSD) program discussed below, are triggered once a pollutant is subject to regulation under any other provision of the CAA. This cascade effect became very important for regulation of GHGs after the landmark case of Massachusetts v. EPA.

50. Mobile sources are governed by Title II. Titles I, III, IV and V apply only to stationary sources. See 42 U.S.C. §§ 7401–7515 (2006).
51. See FARBER ET AL., CASES AND MATERIALS ON ENVIRONMENTAL LAW 544 (2010).
52. See Clean Air Act, 42 U.S.C § 7521 (2006).
53. See id. § 7410.
54. See id. § 7411. What constitutes a “new” or “modified” source is not clear in the statute and is a point of controversy. For further discussion see FARBER ET AL., supra note 51, at 546.
57. See Richardson, supra note 55, at 289.
59. See Richardson, supra note 55, at 290.
60. See id. at 288.
61. 42 U.S.C. § 7475(a)(3) (2006); see also Memorandum from Steven Johnson, EPA Adm’r, on EPA’s Interpretation of Regulations that Determine Pollutants Covered by
C. Massachusetts v. EPA: Keeping the EPA on Task

In Massachusetts v. EPA, a group of twelve states, several local governments, and environmental organizations brought suit when the EPA denied a petition asking it to regulate GHG emissions from motor vehicles.\(^\text{63}\) The petitioners maintained that GHG emissions were accelerating climate change, which will “have serious adverse affects on human health and the environment.”\(^\text{64}\) The EPA claimed it lacked authority to address climate change through the CAA and that regulation at that time would be unwise.\(^\text{65}\) Underlying the EPA’s decision was the Bush administration’s passive approach to addressing climate change, which emphasized curbing emissions through voluntary reductions.\(^\text{66}\) In a 5–4 decision, the Supreme Court rejected both of the EPA’s arguments, determining that the CAA provides “unambiguous” authority to regulate GHGs as an air pollutant.\(^\text{67}\) The Court reasoned that the CAA was intentionally drafted with “broad” language to ensure “flexibility necessary to forestall such obsolescence.”\(^\text{68}\)

The Court found the EPA’s second line of reasoning equally untenable. It held that the decision whether to regulate must be based on whether a substance contributes to air pollution, rather than on broad policy determinations.\(^\text{69}\) Moreover, uncertainty is not a sufficient means of avoiding regulation unless the uncertainty is “so profound that it precludes EPA from making a reasoned judgment as to whether the gas contributes to global warming.”\(^\text{70}\) Essentially, the Court determined that EPA must regulate if it found GHGs to be a pollutant.\(^\text{71}\) Thus, EPA could avoid regulating mobile sources only if it found

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\(^{63}\) Id. at 497.

\(^{64}\) Id. at 510.

\(^{65}\) See id. at 515. EPA claims that it would be unwise because of lack of certainty of science and because it might “hamper the President’s ability to persuade key developing countries to reduce greenhouse gas emissions” Id. at 513–14.

\(^{66}\) See Heidy Abreu & Miguel Loza, Massachusetts v. Environmental Protection Agency (05-1120), LEGAL INFO. INST., http://topics.law.cornell.edu/supct/cert/05-1120 (last visited Mar. 27, 2011); see also Massachusetts v. EPA, 549 U.S. at 513–14 (“EPA . . . stated that such regulation would conflict with the President’s ‘comprehensive approach’” and “might also hamper the President’s ability to negotiate with ‘key developing nations’ to reduce greenhouse gas emissions.”).

\(^{67}\) See Massachusetts v. EPA, 549 U.S. at 528. The CAA defines pollutant “air pollutant” to include “any air pollution agent or combination of such agents, including any physical, chemical, biological, [or] radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.” 42 U.S.C. § 7602(g) (2006). “Welfare” is defined broadly: among other things, it includes “effects on . . . weather . . . and climate.” Id. § 7602(h). The court found these terms to be sufficiently broad to include GHGs. See Massachusetts v. EPA, 549 U.S. at 532.

\(^{68}\) Id. at 532.

\(^{69}\) See id. at 532–33.

\(^{70}\) Id. at 534.

\(^{71}\) See id. at 533.
that GHGs did not contribute to climate change or if it provided a "reasonable explanation" as to why it could not or would not exercise its discretion to determine whether they do."72 Given the strength of scientific evidence supporting GHGs as the leading cause of climate change,73 Massachusetts v. EPA has left the EPA with little discretion as to whether to regulate GHGs under the CAA.

D. The Tailoring Rule Explained

In light of the Court's determination in Massachusetts v. EPA and the subsequent endangerment finding under section 202,74 the EPA's decision to regulate GHG-producing stationary sources under the CAA was unsurprising. Instead, it is the way the EPA chose to implement the regulation that has stirred controversy. The EPA maintains that the "tailoring" of permitting applicability criteria is necessary to ensure its actions are "consistent with Congress's expectations that the programs would not impose undue costs to sources or undue administrative burdens to permitting authorities."75 This Part will explain the Tailoring Rule in detail, including its requirements and rationale.

The Tailoring Rule regulates GHGs76 emitted from stationary sources through two preexisting permitting programs: Title V and PSD. PSD, sometimes called new source review, is a preconstruction review and permitting program that is intended to ensure that air quality of a given area is maintained.77 All new "major" and "modified" stationary sources require a PSD permit.78 A source is considered a "major" source if it emits 100 tons per year (tpy) or 250 tpy depending on the source category.79 PSD permits impose site-specific, technology-based requirements.80 They also require a demonstration that the source "will not create or exacerbate violation of air quality standards in the area surrounding [it]."81 Specific requirements depend

72. Id.
73. See id. at 510–11. See generally INT'L PANEL ON CLIMATE CHANGE, FOURTH ASSESSMENT REPORT (2007).
75. Tailoring Rule, supra note 9, at 31,517.
76. See id. at 31,519–20. "GHGs" refers to six different greenhouse gases: CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Id at 31,518. Since each gas has different heat trapping capabilities, the EPA uses a concept called global warming potential to regulate them as one pollutant. Id. Global warming potential for a particular GHG is "the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period." Id. at 31519. Put more simply, global warming potential provides a single metric to evaluate the mixture of GHGs based on the equivalent of CO₂ required to trap the same amount of heat. Id. The metric is referred to as carbon dioxide equivalent. Id.
77. See 42 U.S.C. § 7470 (2006); see also FARBER ET AL., supra note 51, at 549.
78. See Tailoring Rule, supra note 9, at 31,519.
81. Richardson et al., supra note 10, at 24.
on whether the area is in attainment or nonattainment under NAAQS.\textsuperscript{82} Where the EPA has not yet set NAAQS for a pollutant, as is the case for GHGs, only the “attainment” program applies,\textsuperscript{83} and all sources must apply best available control technology (BACT), which is established on a case-by-case basis.\textsuperscript{84}

Unlike PSD permits, Title V permits do not impose control requirements; instead, they are general operating permits that serve as a single document where one can find all control requirements that apply to a particular source for a given pollutant.\textsuperscript{85} For example, PSD permitting BACT requirements would be listed on a Title V permit. The permits also generally contain monitoring and reporting requirements, fee payments, and annual certification by a responsible official.\textsuperscript{86} All “major” operating sources require a Title V permit.\textsuperscript{87} A source is considered “major” for Title V purposes if it emits more that 100 tpy.\textsuperscript{88}

The Tailoring Rule is intended to prevent small sources of GHGs from being subject to Title V and PSD permits. Without the Tailoring Rule, GHGs would have become “subject to regulation” as soon as the EPA’s regulations for mobile sources of GHGs took effect in January 2011.\textsuperscript{89} This would have required PSD permits for “major” sources, as presently defined by the CAA.\textsuperscript{90} Because GHGs are emitted in such large amounts,\textsuperscript{91} many small sources traditionally not regulated under the CAA, such as apartment complexes and hospitals, would now require permitting.\textsuperscript{92} The problem with such an expansion of the permitting system is twofold. First, small sources would be seriously burdened by costs of the permitting process and technology requirements.\textsuperscript{93}

\textsuperscript{82} When NAAQS are established, the states must designate areas as “attainment,” “nonattainment,” or “unclassifiable” based on whether they have achieved the NAAQS. See 42 U.S.C. § 7407(d)(1)(A) (2006).

\textsuperscript{83} There was some debate as to whether EPA could regulate GHGs under PSD without issuing NAAQS, due to an ambiguity regarding when a source is “subject to regulation” under PSD. In 2008 the EPA published an interpretative memo which clarified that the EPA should interpret “subject to regulation” to apply to “each pollutant subject to either a provision in the Clean Air Act or regulation promulgated by the EPA under the Clean Air Act that requires actual control of emissions of that pollutant.” Under this interpretation, once GHGs became a regulated pollutant under section 202, they became “subject to regulation” under the PSD permitting program for stationary sources. See PSD Interpretative Memo, supra note 61; see also Tailoring Rule, supra note 9, at 31,519.

\textsuperscript{84} The process of determining BACT first requires the EPA to identify what emissions control technologies are available. Then the infeasible technologies are eliminated, and the remaining options are ranked by control and cost effectiveness in order to determine the appropriate BACT. See Tailoring Rule, supra note 9, at 31,520.

\textsuperscript{85} See id. at 31,521.

\textsuperscript{86} See id.

\textsuperscript{87} See id.


\textsuperscript{89} See Tailoring Rule, supra note 9, at 31,516. This is because at this time GHGs would become “subject to regulation” under the “PSD Interpretative Memo” definition. See supra note 83 and accompanying text.

\textsuperscript{90} See Tailoring Rule, supra note 9, at 31,516; see also PSD Interpretative Memo, supra note 61.

\textsuperscript{91} See Richardson et al., supra note 10, at 25–26.

\textsuperscript{92} See Tailoring Rule, supra note 9, at 31,547.

\textsuperscript{93} See id. at 31,516.
Second, the expansion would “vastly exceed the current administrative resources” of state and local permitting authorities. The Tailoring Rule prevents such results by adopting a step-by-step approach to phasing emitters into the permitting programs and requiring the EPA to conduct research to improve the permitting scheme in order to address these issues in the future.

The first step of the Tailoring Rule went into effect January 2, 2011. Under step one, PSD and Title V permit requirements apply only to sources already subject to permitting for non-GHG pollutants. These sources are referred to as “anyway” sources. All new or modified “anyway” sources that emit or have the potential to emit at least 75,000 tpy of carbon dioxide equivalent (CO₂e) require PSD permits. All “anyway” sources regardless of emission levels require Title V permits and associated requirements.

The second step of the Tailoring Rule goes into effect July 1, 2011. At that time, a new subset of sources will be added to the permitting applicability for GHG emissions. All new sources with the potential to emit at least 100,000 tpy CO₂e will be subject to PSD permitting, regardless of emissions of other pollutants. For Title V permits, all sources that have the potential to emit 100,000 tpy CO₂e will also be subject to permitting in addition to the “anyway” sources.

Unlike steps one and two, step three is yet to be determined. Instead, the EPA commits to issuing a supplemental notice of proposed rulemaking by July 2012, in which it will provide the third step of the phase-in process, and setting the effective date of the third step as July 1, 2013. In the meantime, the EPA commits to “explor[ing] streamlining techniques that may well make the permitting programs much more efficient to administer for GHGs and that therefore may allow expansion to smaller sources.” Additionally, the EPA made an “enforceable” commitment to publish a study evaluating PSD and Title V permitting for GHGs by 2015 and complete further rulemaking based on the study by 2016. The EPA expresses the intention of including smaller sources over time, but does not specify how close to the statutory thresholds it

94. Id. at 31,517.
95. See id. at 31,516.
96. See id. at 31,523.
97. See id.
98. See explanation of CO₂e supra note 76.
99. See id.
100. Requirements include associated monitoring, recordkeeping, and reporting. See id.
101. See id.
102. See id.
103. See id. at 31,524.
104. See id.
105. Id. at 31,516.
106. See id. at 31,525.
will eventually reach. In fact, it specifies that no source with emissions below 50,000 tpy CO₂e will be subject to permitting in the next six years.

E. Legal Rationale for the Tailoring Rule

The root of the controversy surrounding the Tailoring Rule is that the EPA is deviating from the statutory text of the CAA in determining what will constitute a "major" source of GHGs. The EPA asserts that it has the authority to create a more tailored approach under section 301(a)(1), which authorizes the EPA Administrator "to prescribe regulations as are necessary to carry out his functions under [the CAA]." Additionally, the EPA uses the Chevron two-step framework as the legal basis for the rule.

The Chevron two-step is a legal test for determining when an agency's interpretation of the law is permissible. The EPA claims this framework permits the agency to ignore the statutory text's definition of "major" because of the unique characteristics of GHGs. In Chevron v. Natural Resources Defense Council, Justice Stevens laid out the two-step test for judicial review of statutory interpretation. Under the Chevron two-step, the court first asks if the statute speaks clearly to an issue. In general, if the language of the statute is clear, then agency discretion to interpret the statute through regulations is limited. Subsequent case law, however, has created three doctrines that outline exceptions where it is reasonable for an agency to use discretion in its interpretation of the law despite the text being clear on its face: the "absurd results" doctrine, "administrative necessity" doctrine, and "one-step-at-a-time" doctrine. The EPA claims the tailoring is required because regulation under the strict terms of the statute would otherwise defy these three doctrines.

The "absurd results" doctrine authorizes agencies to apply statutory requirements differently than the literal reading if necessary to effectuate congressional intent and avoid absurd or unreasonable results "at variance with the policy of the legislation as a whole." The EPA maintains that using the statutory thresholds for "major" of 100 and 250 tpy would be "absurd" because the results would be inconsistent with congressional intent in two ways. First, Congress intended PSD and Title V programs to apply to "major" sources.

107. See id. at 31,517.
108. See id. at 31,524–25.
110. See id. at 842–43.
111. See id. at 842; see also Tailoring Rule, supra note 9, at 31,517.
112. See Tailoring Rule, supra note 9, at 31,517. Step two provides that where statutory language is ambiguous, an agency has discretion to interpret the ambiguity as long as its interpretation is reasonable. See Chevron U.S.A. Inc. v. Natural Res. Def. Council, 467 U.S. 843 (1984). Even if intent were not clear, Chevron step two would permit authority because it is a reasonable interpretation. See Tailoring Rule, supra note 9, at 31,517.
114. Tailoring Rule, supra note 9, at 31,533.
While most pollutants are unintended byproducts of combustion of specific fuels, CO₂ is the necessary byproduct of all combustion; thus GHGs are emitted in much higher quantities than other pollutants regulated under the CAA. Consequently, a literal interpretation would result in a permitting program “several hundred-fold larger than what Congress appeared to have contemplated.” This would extend permitting requirements to an “extraordinarily large number of small sources” for whom the regulatory structure was not intended. As such, compliance costs would be “unduly high.” Second, such a great expansion of the permitting system would greatly tax agency resources, leading to multi-year backlogs in issuance of permits. Where the goal of the statute is to create an effective pollution regulation, a literal interpretation is absurd because it would overwhelm authorities so as to prevent the program from being effective.

This burden on agency resources also implicates the “administrative necessity” doctrine, which authorizes agencies to interpret statutory requirements in a way that avoids impossible administrative burdens. This doctrine says that an agency is not required to do the impossible; instead, it has the discretion to administer a statute to alleviate “severe” administrative burdens. The EPA invokes administrative necessity here because the state and local permitting authorities would be unable to effectively administer Title V and PSD permits for GHGs without the tailoring threshold requirements.

Finally, the “one step-at-a-time” doctrine provides that “[a]gencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop.” “[A]dministrative action generally occurs against a shifting background in which facts, predictions, and policies are in flux.” Thus, an agency is permitted to reasonably engage in “incremental rulemaking” where it would be paralyzed if all “the necessary answers had to be in before any action at all could be taken.” The EPA uses this doctrine to support the incremental approach of the Tailoring Rule. The three-step nature of the Tailoring Rule gives permitting authorities sufficient time to prepare for expansion of the permitting system and gives the EPA time to explore more cost- and time-efficient means of permitting smaller sources.

116. Id.
117. Tailoring Rule, supra note 9, at 31,533.
118. See id.
119. See Ala. Power Co. v. Costle, 636 F.2d 323, 358 (D.C. Cir. 1979); see also Tailoring Rule, supra note 9, at 31,514–43.
120. See Ala. Power Co., 636 F.2d at 359.
121. See id. at 400.
122. Massachusetts v. EPA, 549 U.S. 497, 524 (2007); see also Tailoring Rule, supra note 9, at 31,544.
124. Id.
Massachusetts v. EPA likely bolsters the EPA’s legal arguments supporting the Tailoring Rule. Because the decision essentially mandated that the EPA produce an endangerment finding and regulations under section 202, GHGs are now “subject to regulation,” giving the EPA little choice but to regulate stationary sources under PSD.\(^{125}\) Since the agency is not just permitted, but required to regulate, courts should defer to its expertise and permit it to implement the statute consistently with congressional intent.\(^{126}\)

\section*{F. Criticism of the Tailoring Rule}

In light of the considerable divergence from the CAA text and consequences of the Tailoring Rule on industry, the Tailoring Rule has, not surprisingly, been the source of great controversy since it was first proposed in 2009.\(^{127}\) The most general criticism is that the CAA as a whole is an inappropriate forum for GHG regulation.\(^{128}\) Because GHGs are distinct from other pollutants in that they are a global pollutant, result in long-term impact, and involve complex systems which face serious uncertainty,\(^{129}\) industry groups and their allies assert that GHGs do not comport with the CAA framework and should not be subject to it.\(^{130}\)

Opponents to regulation of GHGs under the CAA maintain that because Congress did not develop the CAA with pollutants like GHGs in mind, it is ill-suited for GHG regulation.\(^{131}\) Moreover, they claim this poor fit is why Congress was working to develop new legislation outside of the CAA rubric.\(^{132}\) They further contend that the inherent political nature of global environmental issues necessitates the purview of Congress.\(^{133}\) Whether new legislation or

\(^{125}\) See PSD Interpretative Memo, supra note 61.

\(^{126}\) This is consistent with Chevron step two which provides that the court should defer to an agency interpretation of an ambiguous statute as long as the interpretation is reasonable. See Chevron U.S.A. Inc. v. Natural Res. Def. Council, 467 U.S. 837, 843 (1984). This highly deferential standard seems even more appropriate where the agency does not have discretion over whether to act.


\(^{129}\) These issues are most incongruent with NAAQS because NAAQS are based on atmospheric concentration levels. THE CLEAN AIR ACT HANDBOOK 165 (Robert J. Martineau Jr. & David Novello eds., 2nd ed. 2004). Cutting down emissions in a particular location does not produce the same effect in concentration levels; instead, because concentrations remain almost equal throughout the atmosphere, the benefits of reduced emissions are spread across the globe. Likewise, if other countries or regions increase emissions then all regions will experience an equal increase in atmospheric concentrations. To complicate matters further, atmospheric concentrations affect the climate system as a whole, resulting in unequal effects such that concentration levels are not directly related to the severity of impact. See discussion supra Part IA.

\(^{130}\) Walsh et al., supra note 128, at 40 (“[T]he square peg of GHG emissions does not fit the round hole of the CAA.”).

\(^{131}\) See id. at 74.

\(^{132}\) See id.

\(^{133}\) Id.
regulation under the CAA is preferable will be discussed in Part II.B. However, after *Massachusetts v. EPA*, it is clear that the EPA does not have complete discretion to decide whether regulation is the best way to address climate change. Until Congress acts, the EPA is required to work within the legal framework that the Supreme Court has provided.

Opponents also challenge the legal grounds on which the EPA bases the Tailoring Rule. In fact, twenty-five claims against the Tailoring Rule have been consolidated into one case currently in front of the D.C. Circuit. In *Southeastern Legal Foundation v. EPA (Southeastern)*, the State of Texas argues that the legal doctrines underpinning the EPA’s discretionary measures are not legally supported because the CAA unambiguously states the emissions levels for “major” sources. In fact, Texas has outright refused to implement the rule. The Attorney General of Texas filed four petitions to block the Tailoring Rule, claiming it would “threaten the Texas economy and jeopardize Texas jobs.”

Industry groups involved in *Southeastern* intend to prevent regulation at the present time. They maintain that instead of regulating incrementally, the EPA should wait until it can produce a more “reasoned” regulatory scheme. In their view, postponing regulation would prevent present issues involving BACT determinations. Additionally, they argue that delaying regulation, as the EPA has done in the past, would reduce the risk of implementing a scheme that is ineffective or inefficient in terms of cost.

A final line of criticism found in industry comments maintains that the Tailoring Rule is “absurd” because it will be ineffective in reducing GHG emissions. First, industry argues that PSD will not result in emissions reductions. Instead, entities such as manufacturers will just move their manufacturing abroad, resulting in carbon leakage and unfair competitive

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134. See *Massachusetts v. EPA*, 549 U.S. 497, 533–34 (2007) (“Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do . . . . The statutory question is whether sufficient information exists to make an endangerment finding.”).


136. Id.


139. Walsh et al., *supra* note 128, at 40.

140. Industry argues that there are serious issues with applying BACT for GHGs that should be considered on a meta level before individual BACTs are approved. See *id.* These issues include gas being more costly and less reliable than coal, lack of carbon sequestration technology, and delays in permitting actually preventing conversion to “green” technologies. See *id.*

141. See *id.*

142. See *id.* at 41–42.
advantage for foreign businesses.\textsuperscript{143} Second, they argue there are no BACTs for GHG emissions, making it impossible to implement PSD.\textsuperscript{144}

Petitioners in Southeastern are not solely guided by industry interests. Unlike industry groups, environmental groups involved in Southeastern argue the Tailoring Rule is illegal because they want a faster, farther-reaching implementation scheme.\textsuperscript{145} For example, the Center for Biological Diversity believes that the EPA will be able to overcome the administrative burden in a more expeditious manner than they present in the Tailoring Rule, and the law requires them to do so.\textsuperscript{146}

Considering the interests implicated by the Tailoring Rule, an abundance of criticism is to be expected. Whether the EPA’s exercise of discretion will stand up to legal scrutiny is a separate issue. Both the implications of Massachusetts v. EPA and case law from which the EPA bases its actions provide support that it will. Additionally, recent decisions of the Court of Appeals for the District of Columbia Circuit weigh in favor of the EPA’s decisions being upheld. On December 10, 2010, the D.C. Circuit denied the motion to stay the EPA Tailoring Rule, stating that the litigants had not “satisfied the stringent standards” of showing actual harm would result from action.\textsuperscript{147} In January 2011, the court lifted a stay on the EPA’s decision to take over permitting of GHGs in Texas due to Texas’s unwillingness to comply with the Tailoring Rule.\textsuperscript{148} While these preliminary decisions are promising, both claims remain to be fully litigated.

II. THE TAILORING RULE AS AN EXAMPLE OF THE ROLE OF AGENCIES IN PROTECTING PUBLIC INTEREST

Notwithstanding criticism and the specter of continued litigation, the Tailoring Rule is a win for those who support federal action to mitigate climate change. The rule promises meaningful federal-level climate action where otherwise there would be none and offers advantages over recent cap-and-trade legislation proposals. The implications of the Tailoring Rule, however, are much broader. The Tailoring Rule exemplifies how classic advantages of administrative delegation such as insulation, flexibility, and expertise can be vital in ensuring environmental protection. Where industry groups with strong

\textsuperscript{143} See id.
\textsuperscript{144} For example, there is no cost-effective carbon capture plant in the United States. See id. at 42.
\textsuperscript{147} See Steven D. Cook, Court Denies Stay of EPA Climate Rules, Lets EPA Move on Mobile, Stationary Sources, 41 Env’t Rep. (BNA) 2792 (Dec. 17, 2010).
political power stand to be negatively affected by legislation, they will use their power to prevent or compromise legal provisions. As a result, in areas of public policy, especially environmental protection, legislation does not necessarily reflect what is best for the public.\textsuperscript{149} The administrative state can serve an important function in overcoming this divide between what is in the public’s interest and the drivers of legislation in two respects. First, delegation to agencies can ensure action where politics would otherwise prevent new legislation. Second, agency delegation can help ensure that economic interests do not compromise the nature of the action that is pursued.

\textbf{A. The Agency as a Means of Overcoming Politics Preventing Action}

\textit{1. Polarized Politics as an Obstacle to Climate Action}

The Tailoring Rule represents the first U.S. national climate action that imposes enforceable requirements on stationary sources of GHGs; without it, regulation would be unlikely. A review of congressional dealings with climate change, like most recent efforts for environmental protection, reveals polarized partisan perspectives with little chance of successful action.\textsuperscript{150} Senate climate bills never made it past committee approval,\textsuperscript{151} and the America Clean Energy and Security Act, passed by the House in 2009,\textsuperscript{152} never made it to the floor in the Senate.\textsuperscript{153} In July 2010, Senate Democrats announced that they would abandon summer efforts to pass a broad energy and climate bill for the remainder of the year.\textsuperscript{154} While they have expressed interest in using a piecemeal approach to address climate change,\textsuperscript{155} there is no reason to think that these more limited bills will be successful where previous efforts were not. In the House, climate action looks equally bleak. Republicans took control of

\begin{thebibliography}{150}
\item \textsuperscript{149} Cf. Lazarus, \textit{supra} note 45 at 1159 (arguing that the nature of global climate change as a “super wicked problem” makes it extraordinarily difficult to craft effective mitigation legislation).
\item \textsuperscript{150} Cf. Carol Herman et al., \textit{Breaking the Logjam: Environmental Reform for the New Congress and Administration: The Breaking the Logjam Project}, 17 N.Y.U. ENVTL. L.J. 1, 1 (2008) (“For almost 20 years, political polarization and a lack of leadership have left environmental protection in the United States burdened with obsolescent statutes and regulatory strategies.”).
\item \textsuperscript{151} See Dean Scott, \textit{Legislation: With Senate Debate on Climate Change Over, Boxer Democrats Turn Focus to Next Year}, 39 BNA Env’t Rep. (BNA) 1147 (Jun. 13, 2008); see also Patrick Tutwiler, \textit{Climate Change Legislation: Where Does It Stand?}, \textsc{GovTrack INSIDER} (Apr. 27, 2010), http://www.govtrackinsider.com/articles/2010-04-27/climate-change.
\item \textsuperscript{152} See American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009).
\item \textsuperscript{155} See Dean Scott, \textit{Democrats See Hope in Piecemeal Approach to Advancing Climate Change, Energy Bills}, 41 Env’t Rep. Current Dev. (BNA) 2178 (Oct. 1, 2010).
\end{thebibliography}
the House in the midterm elections of 2010, and House Republicans’ 2010 “Pledge to America” promised to oppose any cap-and-trade and energy bills proposed in Congress.

2. The Bigger Picture: The Legislative Process and “Wicked Problems”

The political stalemate on climate change legislation is not a fluke, but a result of a broader challenge proponents of environmental protection face. A “wicked problem” is a term given to public policy issues that are nearly impossible to solve due to “enormous interdependencies, uncertainties, circularities, and conflicting stakeholders implicated by any effort to develop a solution.” Richard Lazarus calls climate change a “super wicked problem” because its unique features make it even more difficult to address. Three main features make climate change “super wicked”: time is not costless; incentives to address climate change are distorted; and there is no governmental framework to address this type of issue.

First, mitigation becomes increasingly more difficult and costly as time passes. Since GHGs remain in the atmosphere for such a long time, simply reducing emissions does not necessarily reduce atmospheric concentrations of GHGs; instead, it only slows the rate increase. To make matters worse, both warmer ocean temperatures, which decrease the ocean’s ability to dissolve CO₂, and deforestation cause even more emissions to reach the atmosphere instead of being soaked up by the earth’s surface. In fact, as time passes, GHG concentration levels in the atmosphere will continue to increase even if we decrease our emissions. Consequently, potential mitigation measures will have to be increasingly more severe and more economically disruptive the longer we wait to implement them.

The second feature that makes climate change a “super wicked problem” is the incongruence between the actors who cause climate change and those

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158. Lazarus, supra note 45, at 1159.
159. Id. at 1153.
160. See id. at 1160.
161. See id.
162. See id. at 1165.
163. See id.
165. C.f. Lazarus, supra note 45, at 1160 (“As greenhouse gas emissions continue to increase, exponentially larger, and potentially more economically disruptive, emissions reductions will be necessary in the future to bring atmospheric concentrations down to desired levels. Future technological advances, therefore, would likewise have to be able to achieve those exponentially greater reductions to make up for lost time.”).
who suffer the consequences. Developed countries, which are responsible for
the majority of emissions, are economically in the best position to address
climate change because they have the economic and technological resources to
do so. Ironically, they are the least susceptible to the negative effects and better
able to adapt, and so they have the least incentive to act.166

The lack of incentive to act is worsened because of certain human
psychological tendencies. First, the human brain is most concerned with where
it is, both physically and temporally.167 In terms of time, humans “discount
future utility and put off long-term investments in favor of short-term
return.”168 This tendency is “orders of magnitudes larger” when those affected
by our decision making are in future generations.169 As with temporality,
humans are most apt to address issues physically close enough for them to
experience the negative effects.170 In the short term, developing countries will
suffer the most from climate change.171 Thus, Americans determining U.S.
climate policy are far removed physically from the worst effects of climate
change, further limiting incentives to address the issue. Finally, the complexity
of the causal chain in climate change poses an issue for incentivizing climate
change mitigation.172 The connection between driving a car or turning on the
lights and sea level rise or the spread of virulent diseases is by no means an
intuitive relationship.173 Because the cause and effect are not easily associated,
people are less likely to stop harm-causing activities.174

The third feature that makes climate change “super wicked” is the lack of
a legislative framework to serve as a model for an issue of global importance.175
U.S. lawmaking institutions were constructed to prevent “tyranny of the
majority” through separation of powers176 and short-term election cycles for
leadership positions to ensure political accountability.177 These characteristics
favor government acting slowly and incrementally.178 Unfortunately,
environmental issues tend to be complex and involve multiple actors, which
require more comprehensive actions.179

The economic implications of environmental action are also an issue.
Because of environmental law’s inherently redistributive nature, there will

166. See Lazarus, supra note 45, at 1160.
167. See id. at 1174–75.
168. Id. at 1174.
169. See id. at 1167.
170. See id. at 1176.
172. See Lazarus, supra note 45, at 1178.
173. See id.
174. See id.
175. See id. at 1160–61.
176. See id. at 1179.
177. See id. at 1180.
178. See id.
179. See id. at 1181.
always be interests who are negatively affected by the action and resist change. These groups have a great interest in investing considerable resources to prevent change. Since elections depend heavily on massive campaign donations, such strong financial interests often have strong political power. Additionally, these groups can emphasize scientific uncertainty and concerns about other countries’ emissions to gain public support against local mitigation action. On the other hand, those favoring stronger environmental protection laws tend to have more limited economic resources or ability to assemble. Moreover, politicians seeking reelection will tend to invest their time and appropriate money to causes that will provide short-term benefits. Those adversely affected by environmental issues are spread out in time and space, making it harder to effectively campaign for action.

3. Overcoming Political Obstacles to Addressing “Wicked Problems”

Lazarus’s characterization of climate change as a “super wicked problem” elucidates why Congress has been unable to pass climate legislation. The cards are stacked against climate change legislation, and there is little indication that the grim outlook will improve. It is in this context that administrative power provides a pivotal escape from the obstacles of addressing climate change through issue specific legislation. The development of framework legislation, like the CAA, circumvents some of the obstacles to addressing “wicked” problems.

First, the CAA does not address specific pollutants, but permits the EPA to make this determination, thereby reducing special interest groups’ initial incentive to resist. For example, where it was not expected that GHGs would be regulated under the CAA, there was no incentive for sources of GHGs to invest in prevention of the Act. Second, it does not require political support as scientific knowledge expands. Once the framework is passed into law, new pollutants or technology are included through regulation by the expert agencies without having to jump through congressional hoops. By delegating to the agency, issues are removed from the grasp of economic interest groups and placed in the hands of experts to determine how to best serve the public interest, within the framework developed by Congress.

This insulation becomes increasingly important when political pressure would prevent environmental protection. Where politics of the President undermine the goals of a statute, the courts serve as a watchdog, ensuring the

180. See id. at 1180.
181. See id.
182. See id.
183. See id. at 1183.
184. See id.
185. See id.
187. See Walsh et al., supra note 128, at 40.
agency adheres to its statutory mandate. This is exemplified in *Massachusetts v. EPA*, where the Court acted as an enforcer of congressional intent, ensuring that the EPA maintained its role of environmental protector. The Court stated, "To the extent that [the statute] constrains agency discretion to pursue other priorities of the Administrator or the President, this is the congressional design."\(^\text{188}\) In other words, the Court would not permit presidential policy to override statutory requirements.

While characteristics of climate change make it somewhat different from previously regulated pollutants, the Tailoring Rule demonstrates that the CAA framework is workable.\(^\text{189}\) With little hope for a better option, we should not abandon regulation under the CAA because it is not perfect. To the contrary, the Tailoring Rule should be applauded as an example of agency flexibility and insulation in a time of rapidly improving scientific knowledge, polarized politics, and interest groups hostile to regulation.

**B. The Agency as a Means of Providing Regulation that Prioritizes Environmental Protection over Economic Interests**

Time and again, literature on U.S. climate action purports that climate legislation under a cap-and-trade scheme would be favorable to regulation under the CAA.\(^\text{190}\) One primary rationale is that unlike the command-and-control regulation the CAA requires, proposed climate legislation would permit an economy-wide cap-and-trade (CAT) program, which would boast increased flexibility, allowing emitters to reduce emissions in the most cost-effective manner.\(^\text{191}\) Given that Congress is at a standstill on the issue, these arguments are inconsequential. But pretending arguendo that we were faced with equally viable options—climate change legislation and regulation under the Clean Air Act—the favorable choice is not as simple as much of the literature suggests. In the context of climate change, there is reason to believe that emphasis on economic efficiency would come at the expense of mitigation effectiveness.\(^\text{192}\)

Here, delegation to administrative agencies in the context of environmental issues offers a second advantage: where framework legislation provides for agencies to consider environmental protection first, and costs second (or not at all, in some contexts), the resulting agency regulation is more

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\(^{188}\) See *Massachusetts v. EPA*, 549 U.S. at 533.

\(^{189}\) This is assuming we are willing to permit agency discretion as was exhibited in the development of the Tailoring Rule.

\(^{190}\) See Adler, *supra* note 130, at 74; see also Richardson et al., *supra* note 10; Walsh et al., *supra* note 128, at 40.


likely to protect the environment than would comprehensive legislation developed under an economic, market-based model. This Part will first discuss the shortcomings of a CAT program in the context of GHGs. Then it will discuss the advantages of using the CAA framework. Finally, it will utilize the Tailoring Rule as a case study to demonstrate how agency delegation increases the chances of producing regulation favorable to environmental protection.

1. Shortcomings of Addressing Climate Change through Comprehensive Legislation

In certain respects, GHGs are a good candidate for CAT regulations. Carbon emissions are fungible. They are also non-toxic and spread equally throughout the atmosphere. These characteristics are important for trading because it does not matter where GHGs are being emitted as long as total emissions are reduced. Also, there are substantial differences in the cost of controlling GHG emissions. Where costs of emission reductions differ among actors, CAT flexibility mechanisms are economically favorable because they promote solving problems at the least possible cost.

On the other hand, applying the CAT framework to GHGs poses some issues worth examining. Holly Doremus and Michael Hanemann elucidate some of these problems by comparing a potential GHG CAT program with the CAT program for acid rain, a notable success. First, Doremus and Hanemann point out that the processes which produce the compounds differ. Sulfur dioxide (SO₂), which causes acid rain when released into the atmosphere, is a byproduct of burning high-sulfur fossil fuels, mostly coal.

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193. See id. at 803.
195. See Richardson et al., supra note 10, at 13.
196. However, there are social justice concerns that GHG trading will create hotspots of harmful co-pollutants often emitted by GHG emitters. See Michael P. Vandenbergh & Brooke A. Ackerly, Climate Change: The Equity Problem, 26 VA. ENVTL. L.J. 55, 60 (2008).
197. See Doremus & Hanemann, supra note 192, at 803.
198. See AGRIC. MKT. CARBON WORKING GRP., supra note 191.
199. This section assumes that if a climate change bill were passed it would be based on a comprehensive CAT mechanism, as opposed to a more limited CAT mechanism possible under the CAA. While it is possible for Congress to amend the CAA, as it did with sulfur dioxide regulation to counteract acid rain, discussions in Congress do not suggest this is likely to happen again soon. See 42 U.S.C. 7651 (2006); see discussion supra Part II.A.
200. See Doremus & Hanemann, supra note 192.
202. See Doremus & Hanemann, supra note 192, at 806.
CO\textsubscript{2} on the other hand is a product of all combustion\textsuperscript{204} As a result, while SO\textsubscript{2} emissions can be avoided by switching to a low sulfur fuel, CO\textsubscript{2} emissions cannot be avoided without stopping fuels from being burnt altogether\textsuperscript{205}.

Additionally, at the time the CAT was implemented for acid rain, control technology already existed: scrubbers could be installed on smoke stacks to prevent SO\textsubscript{2} from escaping into the atmosphere\textsuperscript{206}. Unfortunately, there is no cost effective technology for preventing CO\textsubscript{2} emissions on an existing plant\textsuperscript{207}. While carbon sequestration is technologically possible, further research and development will be necessary before it becomes a cost-effective option\textsuperscript{208}. Other techniques, such as improving thermal efficiency of coal-fired power plants, are likely to achieve only modest improvements of 2–5 percent reductions for most plants\textsuperscript{209}. Because control technology is lacking, addressing climate change will require dramatic reductions in consumption of fossil fuel or development of new methods for carbon sequestration\textsuperscript{210}. This is very different from the changes required to address acid rain where conservation and technological innovation played no role in emissions reductions\textsuperscript{211}.

These key differences between CO\textsubscript{2} and SO\textsubscript{2} might make a CAT program for climate change less effective. First, market skeptics believe that when technological advance is not required, the effectiveness of trading is compromised\textsuperscript{212}. Second, the market might not effectively encourage demand side management\textsuperscript{213}. The market cannot effectively result in demand side management where consumers lack information, lack choices, or find it prohibitively difficult to change their actions\textsuperscript{214}. In the case of acid rain, the power generation industry reduced emissions through fuel choice and control technology and thus did not depend on consumer decision making, as climate change will.

Another difference between addressing acid rain and climate change is the sheer number of sources and quantity of emissions. Whereas coal-fired power plants were the single dominant source of SO\textsubscript{2}, GHGs have various types of...


\textsuperscript{205} See Doremus & Hanemann, supra note 192, at 806.

\textsuperscript{206} See HARRINGTON ET AL., supra note 201, at 57.


\textsuperscript{208} See Doremus & Hanemann, supra note 192, at 806.


\textsuperscript{210} See Doremus & Hanemann, supra note 192, at 806.

\textsuperscript{211} See id. at 810, 812.

\textsuperscript{212} See id. at 810.

\textsuperscript{213} See id. at 814–16.

\textsuperscript{214} See id.
sources emitting in much greater quantities.\textsuperscript{215} The sheer size of the GHG market presents obstacles for any potential program’s efficacy. Trading on such a large scale creates fear that creating carbon securities will result in mortgage-crisis-style overestimation.\textsuperscript{216} It also raises social justice concerns for hotspots of harmful co-pollutants often emitted by GHG emitters.\textsuperscript{217} In sum, while using CAT emphasizes reducing emissions at the cheapest price, in the context of climate change, it is unclear just how effective at reducing emissions it would be because of the need for technological advance and demand-side management.

2. \textit{The Advantages of Addressing Climate Change through the Clean Air Act}

Examining the CAA framework in comparison to a CAT framework elucidates certain ways in which the CAA framework is superior. First, the Clean Air Act uses a cooperative federalism approach through SIPs,\textsuperscript{218} capitalizing on states’ resources and previous actions to address climate change.\textsuperscript{219} Unlike the federal government, many U.S. states have taken it upon themselves to start climate change mitigation action.\textsuperscript{220} Cooperative federalism allows states to incorporate previously successful efforts into their implementation plans.\textsuperscript{221} This is especially important in the case of climate change because states vary in how they contribute to GHG emissions.\textsuperscript{222} For example, in 2007, electricity only comprised approximately 12 percent of California GHG emissions, but comprised over half of Montana’s GHG emissions.\textsuperscript{223} Thus, state-specific plans allow states to analyze their local portfolio of sources to maximize effectiveness.

A second advantage of cooperative federalism is that it allows states to directly impact decision making where the market falls short. For example, states traditionally have land-use, building, and transportation laws.\textsuperscript{224} City planning and building codes affect infrastructure choices that can have

\begin{itemize}
  \item \textsuperscript{215} See id. at 807.
  \item \textsuperscript{218} See 42 U.S.C. § 7410 (2006).
  \item \textsuperscript{219} See Doremus \& Hanemann, \textit{supra} note 192, at 823.
  \item \textsuperscript{220} Twenty-five U.S. states have completed or are in the process of developing a comprehensive climate action plans. See \textit{Climate Action Plans}, \textit{Pew Ctr. on Global Climate Change}, http://www.pewclimate.org/what_s_being_done/in_the_states/action_plan_map.cfm (last visited Mar. 15, 2011).
  \item \textsuperscript{221} See Doremus \& Hanemann, \textit{supra} note 192, at 823.
  \item \textsuperscript{222} See id. at 826–27.
  \item \textsuperscript{224} Doremus \& Hanemann, \textit{supra} note 192, at 827.
\end{itemize}
tremendous impacts on energy consumption. Markets are prevented from addressing this issue because the planners, builders, and designers are usually not the people who will later pay the costs of energy consumption and waste. For example, a builder might choose a cheaper building material over one that provides better insulation because he will not be paying future heating, ventilation, and air conditioning bills. On the other hand, the CAA SIP framework permits each state to find the most appropriate way to cut emissions. In this way, cooperative federalism provides an avenue for promoting technological innovation where the market does not.

Moreover, regulation of GHGs under the CAA does not preclude the development of a CAT program in specific source categories. Under section 111(d), the EPA could potentially set up a trading scheme within a source category if it was the “best system of reduction,” as it did with mercury emissions in 2005. Additionally, Congress could provide an amendment to the CAA as it did with acid rain, though this is unlikely for the reasons already stated. A CAT program operating under the CAA would provide certain efficacy advantages over the stand-alone CAT bills proposed in Congress. For example, CAA trading is only within one industry and is more closely regulated. While this reduces the economic advantages of a CAT program, it also creates more accountability for emissions reductions and increases the probability that sales will be reflective of actual emissions reductions.

3. Agency Delegation as a Means of Producing More Effective Environmental Protection

As discussed in Part II.A, where powerful economic interests are involved in the implementation of environmental regulation, great resistance to environmental legislation is to be expected. This section demonstrates another issue the legislative process poses in addressing “wicked problems”: powerful interest groups push for solutions that are the most economically enticing as opposed to environmentally effective. In the case of climate change, the only bill to pass in either chamber relied almost entirely on CAT. As previously mentioned, CAT programs are favorable for industry because they provide

225. See Younger et al., The Built Environment, Climate Change, and Health: Opportunities for Co-Benefits, 35 AM. J. OF PREVENTIVE MED. 517, 519 tbl.1 (2008).
227. While this rule was rejected by the D.C. Circuit, it was on other grounds, so it is not clear whether it would pass judicial review. See Richardson et al., supra note 10.
228. See discussion supra Part II.A.
greater flexibility and even potential financial gains for those who can sell extra GHG emissions credits. This emphasis on economic efficiency would not be problematic if it did not come at the expense of environmental efficacy, as the above analysis suggests it would.\textsuperscript{231} It is in this type of scenario, where economic and environmental interests support different types of action, that agency delegation serves a second important function. In environmental protection, delegating to agencies increases the chances of environmentally effective protections over economically efficient ones.

In the case of the CAA, having policy decisions made by an agency subject to statutorily mandated considerations accomplishes just that. The CAA declares its primary purpose is to protect “human health and welfare.”\textsuperscript{232} Likewise, the EPA is by its very nature devoted to environmental protection. This is especially critical in a context where environmental protection would otherwise be a secondary priority. The EPA developed the Tailoring Rule with the number one priority of ensuring that the program effectively mitigates climate change.\textsuperscript{233} Thus, the Tailoring Rule is an example of how delegation to an agency in complex, controversial situations can help make certain that policy decisions are based primarily on the critical issue being addressed and not special interests.

It is important to note, however, that shortcomings of GHG CAT programs are not meant to suggest that CAT offers no place in addressing U.S. GHG emissions. CAT mechanisms are not inherently bad or inapplicable to climate change; only, their potential efficacy is more limited in this specific context for the reasons discussed above. In fact, using a comprehensive framework like that of the CAA potentially allows the positives of CAT to be incorporated without compromising environmental efficacy.\textsuperscript{234} Because the EPA is somewhat insulated, yet governed by its congressional mandate, we can be sure that these decisions will be made with environmental protection as the number one priority. This prevents political pressure from compromising the efficacy of the action on behalf of economic interests.

CONCLUSION

The Tailoring Rule is a landmark action, making GHG regulation of stationary sources a reality where the outlook was bleak. The rule represents the EPA’s best effort to adapt a new pollutant to a framework that did not contemplate its existence. The EPA’s choice to adjust emission levels that trigger permitting requirements in order to be consistent with congressional intent is crucial to the effectiveness of the regulation. This choice exemplifies the importance of agency delegation in the context of “wicked problems.”

\textsuperscript{231} See discussion supra Part II.B.
\textsuperscript{232} 42 U.S.C. § 7401(b) (2006).
\textsuperscript{233} See generally Tailoring Rule, supra note 9.
\textsuperscript{234} Limited trading schemes are one example. See discussion supra Part II.B.2.
Where the structure of government makes action difficult or compromises measures taken, it is critical that we have these backstops to ensure that special interests do not trump public welfare.

In the future, lawmakers should use the advantages of constrained agency discretion to prevent short-term politics from hijacking environmental protection efforts. Congress must balance flexibility to adapt to new circumstances with enough guidance to ensure agency action reflects congressional intent and is sufficiently insulated from political pressure. Ultimately, this balance of flexibility and guidance is what permitted the development of the Tailoring Rule. *Massachusetts v. EPA* made clear the EPA must consider the factors the statute mandates when determining whether or not to regulate under the CAA.\(^\text{235}\) In this instance, confining the EPA to the statutory considerations of harm to "human health and the environment"\(^\text{236}\) effectively required regulation of mobile sources of GHGs,\(^\text{237}\) which in turn led to the creation of the Tailoring Rule.\(^\text{238}\)

These advantages are especially important to bear in mind in future discussions of climate legislation. In short, there is reason to believe that regulation of GHGs under the CAA will actually be the impetus for Congress to pass climate legislation. The premise rests on the assumption that regulation of GHGs under the CAA is unfavorable for industry because of the economic burden it imposes.\(^\text{239}\) While we can praise the CAA for its potential to be more effective in reducing emissions, it comes at the price of economic efficiency. First, CAA regulation is inherently less flexible.\(^\text{240}\) Without a cap-and-trade system, sources cannot buy credits or offsets if compliance is particularly expensive in those specific conditions.\(^\text{241}\) Even if a CAT program were set up through CAA, the systems would have to be implemented sector by sector.\(^\text{242}\) Because the cost of reducing emissions varies greatly by sector, separating the program by sector reduces its economic effectiveness.\(^\text{243}\)

Second, permitting systems are expensive and time consuming. Title V permitting requires an average source to expend 866 hours and spend $125,120.\(^\text{244}\) In fact, the entire process can take more than a year.\(^\text{245}\) Third, the

\[\text{References}\]


\(^{237}\) See discussion *supra* Part I.C.

\(^{238}\) See *PSD Interpretative Memo*, *supra* note 61.


\(^{240}\) See *id*.

\(^{241}\) See AGRIC. MKT. CARBON WORKING GRP., *supra* note 191.


\(^{243}\) See *id*.

Tailoring Rule leaves industry unable to plan for further phasing-in of sources. This lack of certainty for future regulations is problematic for industries trying to plan for the future and make investments. This furthers industry interest in congressional action to “provide more legal certainty for the market place.”

With the Tailoring Rule on the table, industry finds itself on a very different playing field than before. The status quo is no longer no regulation, but regulations that are very costly to industry. Consequently, industry has a new set of options to consider. First, it can lobby for Congress to strike down the Tailoring Rule. Industry groups asked the House to delay EPA rules in November, and Republican members of Congress have already attempted to introduce such legislation. Senator Murkowski, Senator Rockefeller, and Representative Capito have proposed bills that would prevent the EPA from regulating GHG emissions from stationary sources for two years. Representative Blackburn has introduced a measure that would prevent the EPA from regulating GHG altogether. Finally, Representative Poe has introduced a bill which would prohibit use of federal funds to implement or enforce EPA GHG regulations. Democrats have defeated Murkowski’s bill. Other proposals have yet to make it to the floor. Even if such a measure passed, President Obama has indicated he would veto such a law, and Republicans do not have sufficient seats in the Senate to override it. Consequently, it is probably not wise for industry to invest heavily in this approach.

The other option is for industry to support Congress passing a new climate change bill, which would override the Tailoring Rule. The development of a

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climate change bill provides industry with the ability to lobby for a regulation program it finds preferable to the Tailoring Rule by providing maximum flexibility and economic incentives. With the support of industry, it is less likely that Republicans will be so adamantly against climate legislation. Consequently, the Tailoring Rule, by changing the status quo, could provide renewed interest in passing climate legislation.

If new comprehensive legislation becomes an option, Congress should not forget the advantages of delegating to agencies discussed in this Note. First, new legislation should be developed with the intention of keeping certain determinations in the hands of the EPA, especially where prioritizing economic incentives would compromise environmental effectiveness. Legislation should provide clear factors and considerations that constrain agency decision making to ensure effective climate mitigation is the top priority.

Additionally, Congress should focus on areas where it can increase flexibility for industry without compromising the effectiveness of new regulation. This could involve drafting amendments to the CAA for climate change, as Congress did with acid rain. For example, Congress could create limited CAT provisions and provide necessary adjustments to NAAQS, so that emissions standards are based on state emission levels and not concentration levels. The key is for Congress to recognize the strategic advantage created by the passage of the Tailoring Rule. In considering future legislation, Congress should think creatively to ensure that economic efficiency is maximized without forsaking the environmental protection guaranteed by current regulation.

In conclusion, the Tailoring Rule serves to illustrate how politics preventing federal environmental protection can be overcome. Comprehensive climate action at the federal level was long overdue and was only accomplished through effective delegation and insulated agency action. This delicate balance of guidance and flexibility that permitted the development of the Tailoring Rule should be pursued in future development of environmental legislation.