

NISKANEN C E N T E R

LEGAL AND ADMINISTRATIVE PITFALLS THAT MAY CONFRONT CLIMATE REGULATION

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Key Takeaways

- Greenhouse gas regulations may be vulnerable to legal attacks, state resistance, and administrative delays that will compromise their ability to produce rapid reductions in emissions.
- Climate regulations will be particularly vulnerable insofar as they are not clearly authorized by legislation.
- Adopting new regulations can be a long, drawn-out process and agencies routinely miss legal deadlines even when regulatory policies are clearly authorized by statutes.
- Because the administrative process is cumbersome, prone to delay, and subject to judicial review, nonregulatory measures may be a more rapid and secure way to reduce GHG emissions.
- A carbon tax would be less vulnerable to administrative delays and legal challenges than comparable emission-control regulations.

Contents

Acting under existing authority	3
Administrative process and unforced errors	7
The legislative route to climate regulation	10
The false promise of agency deadlines	12
Uncooperative federalism	14
Comparing regulatory strategies with fiscal alternatives	16
Conclusion	17
Acknowledgements	17

The ink on the Patient Protection and Affordable Care Act was scarcely dry before the legal assault on health care reform began. The first state lawsuit, which would eventually reach the Supreme Court, was literally filed the very same day President Barack Obama signed the PPACA into law, and additional lawsuits soon followed.¹

Meaningful climate policies are certain to come under equally aggressive legal attack. Indeed, some opponents of the Obama administration’s climate initiatives sought to challenge the Environmental Protection Agency’s Clean Power Plan before it had even been promulgated.² Climate regulations, whether based on existing statutory authority or new legislation, will be assailed in court and challenged throughout the administrative process. Such measures will be vulnerable to defeat and delay.

There is a mismatch between the stated urgency of the problem and the focus on federal regulation as the dominant climate policy tool. Environmental advocates and the Biden administration are committed to urgent action on climate change, as dramatic and rapid reductions in greenhouse gases are necessary to meet the administration’s long-term targets and to ultimately stabilize atmospheric concentrations of greenhouse gases (GHGs) at acceptable levels. Yet some potential paths forward entail significant practical obstacles and legal risks, particularly if the aim is to achieve emission reductions quickly.

Prioritizing regulatory measures over fiscal instruments may be a strategic mistake. Regulatory mandates, particularly if based upon existing statutory authority, will be vulnerable to legal attack, obstruction, and delay. Even in the best of times, the control of GHG emissions through federal regulation would be a long and cumbersome process, requiring dozens of complex rulemakings. Yet these are not the best of times. Federal agencies, the EPA in particular, are depleted of personnel and expertise.³ At the same time, a phalanx of economic and ideological interests stands ready

1. See generally Abbe R. Gluck & Mark Regan, *The Affordable Care Act’s Litigation Decade*, 108 Geo. L.J. 1471 (2020).

2. See *In re Murray Energy Corp.*, 788 F.3d 330 (D.C. Cir. 2015).

3. See Adam Aton, *Biden Transition Team Says It Underestimated Trump’s Damage*, CLIMATEWIRE, Jan. 6, 2021; Joe Tollefson, *Can Joe Biden Rebuild the Ravaged U.S. Environmental Protection Agency*, NATURE, Dec. 16, 2020.

to challenge every climate policy initiative. A potentially hostile judiciary will further complicate efforts to make federal regulation a central component of carbon control.⁴

Enactment of climate legislation expressly authorizing federal regulation of GHG emissions and other regulatory efforts to reduce the carbon intensity of the American economy can reduce the legal risks and accelerate the rate at which such policies can be adopted and implemented, but only on the margin. Adopting regulatory controls, sector-by-sector, technology-by-technology will be immensely resource intensive for the EPA and other federal agencies. Even with authorizing legislation, federal regulatory strategies may remain more time-consuming, conflict-ridden, and legally vulnerable than fiscal measures. A carbon tax, in particular, would be more legally secure and administratively easier to implement than regulatory controls on energy use and GHG emissions. In all likelihood, a nationwide carbon tax could be implemented in less time, and with less legal and administrative wrangling, than a single, sector-specific GHG emission standard.

Any meaningful climate policy will face concerted opposition. If climate policy is to be effective, the fact of such opposition, and its potential to delay and derail implementation, must be taken into account. It is often said that the perfect policy should not be the enemy of the good. It is equally true that a good policy that cannot be implemented as planned is not so good after all. If the aim is to adopt climate policy measures that are capable of reducing GHG emissions quickly and sustainably, this analysis suggests a carbon tax and federal spending initiatives are more promising than federal regulatory measures.

This paper surveys the legal vulnerabilities and administrative obstacles to the rapid adoption of regulatory measures capable of achieving meaningful GHG reductions. This analysis does not purport to identify which climate policies would be the most effective in the abstract, or in the absence of administrative and legal constraints. Nor does this paper make any claims about what sorts of measures can pass Congress now or in the future.⁵ Rather, this analysis seeks to inform the choice of climate strategies by highlighting the risks faced by climate measures once they are enacted by Congress or promulgated by federal regulatory agencies.

Acting under existing authority

The Biden administration takes the reins of federal environmental policy after four years of concerted (though not always successful) efforts to roll back federal climate-change policies. The Trump administration devoted substantial effort to undoing the climate policies of the Obama administration. While no real effort was made to undo the Endangerment Finding that serves as the predicate for the regulation of greenhouse gases as pollutants under the Clean Air Act (likely because any such effort would have failed in court), the Trump administration was able to weaken or repeal various regulatory measures, including the regulation of GHG emissions from oil and gas development, regulations governing fuel economy and GHG emissions from motor vehicles,

4. As six state attorneys general warned the Biden administration in a January letter, “Our states have led the charge in successfully challenging unauthorized and unlawful executive actions . . . You can be assured that we will do so again, if necessary.” Letter from West Virginia Attorney General Patrick Morrissey et al. to President Joseph R. Biden, Jr., Jan. 27, 2021, <https://ago.wv.gov/Documents/2021.01.27%20Letter%20--%20President%20Biden.pdf>.

5. For a discussion of how a carbon tax and other fiscal measures may be adopted through the budget reconciliation process, see Joseph Majkut, Peter Marsters, & Annabelle Swift, *A Carbon Tax in the Context of Budget Reconciliation*, Niskanen Center, Feb. 2021, available at: <https://www.niskanencenter.org/a-carbon-tax-in-the-context-of-budget-reconciliation/>.

and the Clean Power Plan.⁶ New regulations adopted under the EPA's Clean Air Act authority to regulate GHGs, such as regulations on aviation-related emissions, were weaker than environmental advocates would have hoped.

The Biden administration has clear legal authority to reverse many of these regulatory initiatives, if it is willing to put in the time and effort required. Reviving some Obama administration regulations (other than the Clean Power Plan) and adopting more stringent regulations of industry-specific GHG emissions should be possible with relatively little legal risk. Tightening other regulatory measures, such as the National Ambient Air Quality Standards for ozone or particulates, could yield additional GHG reductions. Producing the level of emission reductions necessary to meet the administration's stated targets, on the other hand, will require more, and if the EPA seeks to regulate GHG emissions more broadly under existing legal authority, its efforts would confront significant legal risks.

Federal agencies only have that regulatory authority delegated to them by Congress.⁷ Absent a delegation from Congress, agencies may not impose regulatory burdens or mandates on individuals, firms, or state and local governments. This is particularly true where agencies seek to adopt far-reaching regulatory measures with substantial economic effects. In such cases, "clear congressional authorization matters."⁸ As the Supreme Court has explained repeatedly, where Congress wants agencies to resolve questions of "deep 'economic and political significance,'" it is expected to do so "expressly."⁹ And where an agency "claims to discover in a long-extant statute an unheralded power to regulate 'a significant portion of the American economy,'" the Court will "greet its announcement with a measure of skepticism."¹⁰

In 2007, the Supreme Court held, in *Massachusetts v. EPA*, that greenhouse gases constitute "pollutants" subject to regulation under Section 202 of the Clean Air Act (CAA).¹¹ This decision provided the legal basis for the Obama administration to begin regulating GHGs under the CAA, first from motor vehicles (the subject of Section 202), and then from stationary sources. The Court's decision made it clear that the EPA has some authority to regulate GHG emissions, but it should not be overread.

Despite the broad language of Justice Stevens' majority opinion in *Massachusetts*, it would be a mistake to conclude that the EPA may treat GHGs as pollutants for all potentially relevant provisions of the CAA. The bulk of the CAA was drafted to provide authority for the regulation of traditional pollutants, such as ozone precursors and particulates. Applying these provisions to GHGs

6. The U.S. Court of Appeals for the D.C. Circuit vacated the Trump administration rules repealing the Clean Power Plan and adopting an alternative. See *American Lung Association v. Environmental Protection Agency*, 985 F.3d 914 (D.C. Cir. 2021), but this decision did not resuscitate the Clean Power Plan, and the Biden administration has indicated it will develop an alternative.

7. See *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988) ("It is axiomatic that an administrative agency's power to promulgate legislative regulations is limited to the authority delegated by Congress."); see also *La. Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) ("[A]n agency literally has no power to act . . . unless and until Congress confers power upon it.")

8. See *U.S. Telecom Ass'n v. F.C.C.*, 855 F.3d 381, 417 (D.C. Cir. 2017) (Kavanaugh, J., dissenting from the denial of rehearing en banc).

9. *King v. Burwell*, 576 U.S. 473 486 (2015) (quoting *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 323 (2014); see also *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000)).

10. *UARG*, 573 U.S. at 324 (quoting *Brown & Williamson Tobacco*, 529 U.S. at 159).

11. *Massachusetts v. EPA*, 549 U.S. 497 (2007).

is not always straightforward, largely because GHGs in general, and carbon dioxide in particular, are so ubiquitous. Emission thresholds drafted for particulates and nitrogen oxides apply far more broadly when applied to GHGs — so much so that, by the EPA’s own account, permitting authorities would be “paralyzed” by the influx of required permits.¹² Specifically, the EPA estimated that a strict application of the statutory emission thresholds for “major” stationary sources under CAA Section 165 to GHGs would increase the number of required air pollution permits under the Prevention of Significant Deterioration Program “more than 140-fold,” from 280 to over 40,000 per year.¹³ Subjecting GHGs to the numerical emission thresholds of the CAA’s omnibus permitting provisions in Title V would be even more burdensome, increasing the number of covered facilities from approximately 15,000 to around 6 million.¹⁴

The Obama administration sought to address this concern by phasing in the regulation of GHGs from stationary sources in ways that avoid the “absurd results” that would be produced by applying the relevant CAA provisions, as written, to GHG emissions.¹⁵ Yet, as the Supreme Court concluded, the EPA lacks statutory authority to adjust the regulatory thresholds in this fashion.

Faced with the incongruous consequences of applying statutory provisions designed to accommodate the regulation of traditional pollutants to GHGs, the Supreme Court curtailed the EPA’s regulatory authority. In *Utility Air Regulatory Group v. EPA*, the Court concluded that if relevant CAA provisions are not easily applied to GHGs, then GHGs should not be considered “pollutants” for purposes of those provisions.¹⁶ In other words, the CAA is not an all-purpose climate policy statute, and it may not be read that way by the EPA. The fact that GHGs could be considered air pollutants for some portions of the CAA does not mean that they are pollutants within the meaning of other portions.¹⁷

While the Court in *UARG* allowed the EPA to regulate GHG emissions from the largest stationary sources — those that were already subject to CAA regulation — it did not allow the EPA to use GHG emissions as the basis for asserting regulatory authority over a broader swath of American industry than had previously been subject to federal environmental regulation. Due to the practical consequences of such regulation, the *UARG* Court determined it was unlikely that Congress had granted the EPA such authority. Though not a reversal of the *Massachusetts* holding, *UARG* limits it. Equally significant, *UARG* laid the groundwork for rejecting future efforts to expand EPA authority over GHGs. It was, in the words of Harvard Law School’s Jody Freeman, “a decision laced with the equivalent of improvised explosive devices.”¹⁸

12. See Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 74 Fed. Reg. 55,292, 55,294 (Oct. 27, 2009) (proposed rule).

13. *Id.* at 55,301.

14. *Id.* at 55,295.

15. *Id.* at 55, 303-20 (Oct. 27, 2009).

16. *UARG*, 573 U.S.

17. *Id.* at 320 (“there is no insuperable textual barrier to EPA’s interpreting ‘any air pollutant’ in the permitting triggers of PSD and Title V to encompass only pollutants emitted in quantities that enable them to be sensibly regulated at the statutory thresholds, and to exclude those atypical pollutants that, like greenhouse gases, are emitted in such vast quantities that their inclusion would radically transform those programs and render them unworkable as written.”).

18. See, e.g., Jody Freeman, *Why I Worry about UARG*, 39 HARV. ENVTL. L. REV. 9, 9-10 (2015).

It did not take long for the first of those devices to go off. In February 2016, a majority of the Court voted to stay the Obama administration's Clean Power Plan, thereby preventing it from going into effect.¹⁹ This was a highly unusual move, particularly as the U.S. Court of Appeals for the D.C. Circuit had already declined a stay request, and such decisions are rarely second-guessed by the Supreme Court.²⁰ That action by the Court was fatal for the CPP, which was stopped in its tracks before it could be implemented.

The Supreme Court's stay suggested that a majority of the Court was skeptical of the CPP's legality, either because they believed it exceeded the scope of the EPA's delegated powers or that the EPA cut procedural corners when adopting the rule. We cannot know for sure, as there was no opinion, let alone a ruling on the merits. The stay was nonetheless a powerful signal that the Court was wary of how the Obama administration had sought to use the CAA to combat climate change. Though the Court's composition has changed since the stay was ordered, few believe it has become more hospitable to federal regulation in the interim. To the contrary, the Court is likely more conservative and more skeptical of the administrative state than when it reviewed Obama administration climate policies.

Over the past two decades, the Supreme Court has made clear that broad assertions of agency authority are disfavored. The delegation of authority to regulate is not to be presumed and should be based on unambiguous statutory text. Where an agency seeks to assert broad regulatory authority over large portions of the American economy, the Court expects to see clear statutory authority. The justices believe that questions of "deep economic and political significance"²¹ — so-called "major questions" — should be answered by Congress, not federal agencies. So if an agency seeks to expand its regulatory authority, such as by regulating GHGs throughout the economy, the agency must persuade the Court that Congress authorized such action "expressly." This doctrine, repeatedly embraced by a majority of the justices and aggressively pushed by the Chief Justice and Justice Brett Kavanaugh in particular, provides a road map for legal challenges to efforts by the Biden administration to expand GHG regulation under the Clean Air Act without additional, explicit authorization from Congress.

The Biden Administration could decide to go beyond the repeal and replacement of Trump administration climate-related rules, such as by seeking to adopt a CPP 2.0 or attempting to invoke other provisions of the CAA to target climate change. Some have urged the EPA to declare carbon dioxide a "criteria air pollutant" for which the EPA is obligated to set National Ambient Air Quality Standards. Others have urged the invocation of Section 115's largely dormant authority to regulate emissions that endanger public health or welfare in foreign countries to authorize broad GHG regulation due to the international character of climate change.²² Any such initiative would prompt immediate legal challenge and would likely face a frosty reception from the Supreme Court. The

19. *Chamber of Commerce v. EPA*, 1326 S.Ct. 999 (Mem) (Feb. 9, 2016).

20. As Lisa Heinzerling observed, "In staying EPA's Clean Power Plan, the Supreme Court for the first time stopped a nationally applicable agency regulation prior to an initial decision on the merits of the rule in a lower court." Lisa Heinzerling, *The Supreme Court's Clean-Power Power Grab*, 28 GEO. L.J. 425, 425 (2016).

21. *UARG*, 573 U.S. at 323.

22. See 42 U.S.C. §7415. For a discussion of how this provision could apply to greenhouse gases, see Michael Burger, Ann E. Carlson, Michael B. Gerrard, Jayni Foley Hein, Jason A. Schwartz, & Keith J. Benes, *Legal Pathways to Reducing Greenhouse Gas Emissions Under Section 115 of the Clean Air Act*, 28 GEO. ENTL. L. REV. 359 (2016).

path of bold regulatory escalation would thus represent a particularly high-risk climate change strategy, even before considering the substantial effort any such initiatives would require.

Administrative process and unforced errors

Even where federal agencies have the unquestioned authority to regulate, they may not be able to act quickly to adopt new rules, particularly where (as in the case of climate change) such regulations are certain to be subject to legal challenge. One reason Congress delegates authority to federal regulatory agencies is because of their expertise and ability to incorporate new information and understanding in developing regulations. Members of Congress may also prefer not to revisit individual issues on a regular basis, allowing administrative agencies to develop and implement policies with minimal intervention. It would be a mistake to view the regulatory process as particularly nimble or quick, however. Rather, as some scholars have noted, it can be quite “ossified.”²³

Developing a significant federal regulation can take years of effort by agency officials. Assuming a federal agency has the legal authority to adopt a regulation, the agency must first develop a regulatory proposal. This process alone can take many months, if not years.²⁴ At least one study of EPA rulemaking found that the amount of time the agency spent developing a regulatory measure prior to proposing the rule could be twice as long as the time period between publishing a proposed rule and finalizing the rule.²⁵

Once the regulatory proposal is ready, it is published in the *Federal Register* with a Notice of Proposed Rulemaking. This notice typically triggers a comment period, during which affected interests and others may submit comments about the proposed rule, raising objections and identifying those portions of the proposal that are particularly good or particularly bad.

The proposing agency must review and respond to the filed comments. This too is time-consuming. It is also quite important. Failure to respond adequately to objections or concerns is a common basis upon which federal courts invalidate agency regulations. Thus, a responsible agency that wishes to see its regulation upheld in court will diligently review submitted comments, address any substantive legal, scientific, or technical complaints, and (if necessary) revise the proposed rule to fix any potential problems. At the same time, economic and ideological interests can be expected to seed the comment process with all manner of objections, in the hope that the agency will fail to respond appropriately or make some other misstep.

Although agencies often have cause to revise their regulatory proposals in light of the comments they receive, the agency cannot revise the rule too much without creating a new set of legal vulnerabilities. A final regulation must be a “logical outgrowth” of the original proposal in order to sur-

23. See generally, Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 Duke L.J. 1385 (1992). For an overview of the debate over regulatory “ossification,” see Richard J. Pierce, Jr., *Rulemaking Ossification Is Real: A Response to “Testing the Ossification Hypothesis,”* 80 GEO. WASH. L. REV. 1493 (2012).

24. See Pierce, *supra* note 23, at 1496 (noting EPA rulemaking may take six to eight years for a single rule).

25. See Wendy Wagner, Katherine Barnes & Lisa Peters, *Rulemaking in the Shade: An Empirical Study of EPA’s Air Toxic Emission Standards*, 63 ADMIN. L. REV. 99, 144 n.150 (2011). This study looked at EPA rulemaking under the hazardous air pollutant provisions of the Clean Air Act.

vive legal challenge.²⁶ If, during the comment period, the agency decides that a rule must undergo significant revision, a cautious agency will publish a supplemental notice and invite additional comment, further extending the time frame for issuing a final rule by several months, if not longer. Failure to supplement the rulemaking process in this way is often fatal to regulatory endeavors.²⁷

Given the demands of this process, it should be no surprise that the time between a Notice of Proposed Rulemaking and a final rule is typically well over a year, longer for particularly controversial or complex rules. At the EPA, the time between the initial notice and the final rule is typically around 600 days.²⁸ In the case of the Clean Power Plan, the EPA initially published a proposed rule on June 18, 2014. This proposal, which filled over 120 pages in the *Federal Register*, took months (if not years) to develop.²⁹ After an extensive public comment period and public hearings, and a supplemental proposal published in October 2014, the EPA finalized the rule August 3, 2015, and it was published in the *Federal Register* on October 23, 2015. (A rule must be published in the *Federal Register* before it may take effect.) The rule never went into force, however, as it was stayed by the Supreme Court in February 2016. As noted above, the stay suggested that a majority of justices doubted the CPP's legality, even after it was vetted through that extensive process.³⁰

Undoing rules is no easier than adopting them. As a general rule, it takes at least as much time and agency resources to revise or undo an agency action as it did to take the initial action in the first place. The relevant provisions of the Administrative Procedure Act (APA) apply equally to adopting and repealing federal regulations,³¹ and the standard of judicial review is no more lenient for changes in agency position.³² In addition, as the Supreme Court emphasized in its decision rejecting the Trump administration's attempt to undo the Deferred Action for Childhood Arrivals (DACA) program, before changing course agencies must give extra attention to any reliance interests that may have accrued — that is, plans and investments that other parties made on the basis of the rules in place.³³

Accordingly, the effort to repeal the CPP was nearly as time-consuming as had been the effort to adopt it. In March 2017, President Trump issued an executive order instructing the EPA to review and consider rescinding the CPP and other EPA regulations affecting the energy industry. The EPA issued a proposed repeal of the CPP that October. Two months later, in December 2017, the

26. See, e.g., *Env'tl. Integrity Project v. EPA*, 425 F.3d 992, 995-98 (D.C. Cir. 2005); *Natl Mining Assn. v. Mine Safety & Health Admn.*, 116 F.3d 520 (D.C. Cir. 1997); *Horsehead Resource Development Co. v. Browner*, 16 F.3d 1246 (D.C. Cir. 1994); *Shell Oil Co. v. EPA*, 950 F.2d 741, 757-63 (D.C. Cir. 1991); *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1021-22 (D.C. Cir. 1978).

27. See Wagner, Barnes & Peters, *supra* note 25, at 110 (“the courts have made it painfully clear that if a rule is to survive judicial review, it must be essentially in final form at the proposed rule stage”).

28. See Jacob E. Gersen & Anne Joseph O’Connell, *Deadlines in Administrative Law*, 156 U. PA. L. REV. 923, 946 (2008) (“EPA nondeadline actions take an average of 685 days, versus 611 days for deadline actions.”).

29. As discussed below, in late 2010 the EPA entered into a settlement agreement under which it committed to proposing such regulations no later than July 2011 and final rules no later than May 2012.

30. See Heinzerling, *supra* note 20.

31. See, e.g. 5 U.S.C. §551(5) (defining “rulemaking” as “agency process for formulating, amending, or repealing a rule”).

32. See, e.g., *Motor Vehicle Mfrs. Assn v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42 (1983) (“the direction in which an agency chooses to move does not alter the standard of judicial review established by law”).

33. See *Dept of Homeland Security v. Regents of the University of California*, 140 S.Ct. 1891, 1913 (2020) (“When an agency changes course, as DHS did here, it must “be cognizant that longstanding policies may have ‘engendered serious reliance interests that must be taken into account.’” (quoting *Encino Motorcars, LLC v. Navarro*, 136 S.Ct. 2117, 2126 (2016) (cleaned up)).

EPA published an Advance Notice of Proposed Rulemaking for a possible replacement of the CPP. The final rule repealing and replacing the CPP with the Trump administration alternative was published July 8, 2019, to take effect in September. As with the CPP, the rule faced an unwelcome reception in federal court, and was struck down by the U.S. Court of Appeals for the D.C. Circuit in January 2021.³⁴

The Administrative Procedure Act requires that agencies provide “a concise general statement” of a regulation’s “basis and purpose.”³⁵ In practice, the accompanying statement is neither concise nor general. To the contrary, when an agency publishes a final rule, the *Federal Register* notice may span dozens of pages. 100-plus-page notices are not uncommon, and are often supported by additional documentation, including Regulatory Impact Analyses and Response to Comment documents. The various procedural requirements may be excessive or unnecessary, as some scholars have argued, but they are what courts expect. A successful court challenge to a federal regulation may require an agency to start over from scratch. Therefore, it behooves agencies to take their time to ensure they can demonstrate to a reviewing court that they acted within their legal authority, considered relevant matters, and engaged in “reasoned decision-making.” Agencies that wish to see their rules upheld in court spend extra time ensuring that they have responded to any concerns that could be raised in litigation. Cutting corners in the rulemaking process increases the likelihood of a successful legal challenge.³⁶

Judicial review, much like the rulemaking process, takes substantial time as well, often several years. Sometimes courts allow regulations to take effect while review is pending, but not always, and particularly not when courts are made aware of serious challenges to a regulation’s legality. As noted above, the Supreme Court took the unusual step of staying the Obama administration’s Clean Power Plan, and the Court appears increasingly willing to consider such motions before high-profile cases are resolved by lower courts.³⁷

Where one regulation serves as the predicate or complement to another regulatory initiative, the delays wrought by the procedural requirements and judicial review can cause something of a traffic jam. If an agency needs to know that one rule will be in place before adopting a related policy in a subsequent rule, it can be forced to wait while legal challenges to the predicate rule work their way through the judicial system. And if the predicate regulation is invalidated, the agency may have to redo that rule from scratch before proceeding to the next one.

As the above indicates, the rulemaking process is incredibly resource-intensive for federal agencies. This limits the number of major rules an agency can be expected to promulgate in a given year or at a given time. In this regard it is worth noting that the EPA does not typically finalize more than seven significant regulations in a given year.³⁸

34. Although the three judges disagreed on the rationale, they were unanimous in rejecting the Trump regulation. See *American Lung Assn v. EPA*, 985 F.3d 914 (D.C. Cir. 2021).

35. See 5 U.S.C. §553.

36. See Gersen & O’Connell, *supra* note 28, at 971 (noting that “when agencies sacrifice deliberative process” to accelerate the regulatory process, the “the odds that existing decisions will fail” to survive judicial review increase).

37. See Stephen I. Vladeck, *The Solicitor General and the Shadow Docket*, 133 HARV. L. REV. 123 (2019).

38. See U.S. Gov’t Accountability Office, *Environmental Litigation: Impact of Deadline Suits on EPA’s Rulemaking Is Limited*, GAO-15-34 (2015), at 9 (noting that the EPA issued 32 major rules between May 31, 2008 and June 1, 2013, for an average of 6.4 major rules per year).

The American economy cannot be decarbonized by issuing a handful of rules, however. Each discrete regulatory requirement will have to navigate the process, and each must be based upon its own legal authority. This means promulgating regulations, sector-by-sector and source-category-by-source category, and revising these regulations on a periodic basis. This is a long, arduous road for climate policy to travel.

The legislative route to climate regulation

Enacting climate legislation can reduce some of the risks to climate regulation, but not all of them. First, and most significantly, standards and requirements enacted into law by Congress are not subject to the delays and legal challenges that may stall or sidetrack agency regulations. Agencies are subject to the requirements of reasoned decision-making and the Administrative Procedure Act. Congress is not. In addition, if Congress clearly and explicitly delegates authority to specific agencies to adopt particular types of regulations, this would prevent legal challenges premised on the argument that Congress has failed to authorize agency action, including legal challenges that would be based upon the ‘major’ questions doctrine. Even better, if Congress writes relevant legal requirements directly into the statute, as it has sometimes done in revising the CAA, it would eliminate any question about agency authority.

While climate legislation would close the door on some legal challenges, many legal and administrative pitfalls would remain. For starters, insofar as legislation instructs agencies to adopt regulations, those regulations would still be subject to the relevant procedural requirements and legal challenges as other regulatory actions. The adoption of rules would still involve a time-consuming rulemaking process, and the results of any such rulemakings would be subject to legal challenges and delays much like other regulations. Further, insofar as such legislation either delegated broad, open-ended authority or attempted to conscript state governments to assist in achieving its goals, it would be vulnerable to other sorts of legal challenges.

Regulatory climate legislation is sure to produce a dramatic increase in relevant agency workloads and litigation. Consider the discussion draft of the Climate Leadership and Environmental Action for our Nation’s Future Act (aka the “CLEAN Future Act”) as an example.³⁹ This draft proposal outlines a comprehensive regulatory strategy for shifting away from fossil fuels and reducing greenhouse gas emissions. It also envisions imposing dramatic new obligations on existing agencies, the Department of Energy and Environmental Protection Agency in particular, including the issuance of dozens of new regulations within a very short time frame.

The CLEAN Future Act draft contemplates requiring the EPA to adopt new regulations for the following, all within the first two years after the statute’s enactment, either alone or in conjunction with other agencies:

- Standards of measurement for determining the carbon intensity of categories of electricity generating units for determining and issuing zero-emission electricity credits (Section 204);

39. See CLEAN Future Act discussion draft released in March 2021, *available at* <https://energycommerce.house.gov/sites/democrats.energy-commerce.house.gov/files/documents/CFA%20Bill%20Text%202021.pdf>.

- Standards for the safe and permanent storage of carbon dioxide for the purpose of issuing zero-emission electricity credits (Section 204);
- Rules to ensure generating units eligible for zero-emission electricity credits abide by applicable labor standards (Section 204);
- Measures implementing a proposed Clean Electricity Standard (Section 210);
- Requirements for annual benchmarking submissions required annually from owners of covered buildings (Section 383);
- GHG emission standards for “every class or category of new nonroad engines and new nonroad vehicles” (Section 401);
- GHG emission standards for new locomotives and engines used in locomotives (Section 401);
- GHG emission standards for new and in-service aircraft engines (Section 401);
- Standards for products and materials to be designated eligible for a federal “Buy Clean” program (Section 524);
- Injection-well standards for enhanced oil recovery and carbon sequestration (Section 621);
- Revising the criteria for coal combustion residual units (Section 622);
- Listing hydrogen sulfide as a hazardous air pollutant (Section 624);
- Determining whether drilling fluids and like materials are to be listed as hazardous wastes (Section 625);
- Revising criteria for the receipt and handling of drilling fluids, produced waters, and other wastes associated with oil and gas development (Section 625);
- Methane emission standards for the oil and natural gas sector (Section 701);
- Prohibiting unnecessary flaring at natural gas wells (Section 702);
- Black carbon emission standards (Section 712)
- Standards for state preparation and submission of GHG emission inventories (Title VIII; Subtitle A);
- Standards for the submission of state climate plans for “planning period 1,” including model emission control strategies, governing emissions through 2030 (Title VIII; Subtitle A);
- Minimum criteria for state climate plans and plan revisions that must be met before EPA review of state submissions (Title VIII; Subtitle A);
- Standards for carbon-sink measurement (Title VIII; Subtitle A);
- Standards for the implementation of the subtitle on product standards and producer responsibility (Title IX; Subtitle B).

The CLEAN Future Act requires the EPA to promulgate additional regulations on a longer time scale or without a set deadline and further anticipates that the EPA will be required to review and update many of these regulations on a periodic basis. In addition, the draft legislation requires EPA to review and approve (or disapprove) state climate plans modeled on the existing CAA state implementation plan process and impose a “federal backstop carbon fee” in noncompliant states. Were that not enough, the CLEAN Future Act draft further requires the EPA to review and provide written recommendations and reviews of hundreds of action plans developed by federal agencies and their subunits every two years,⁴⁰ and to issue various reports and analyses to guide federal climate efforts. However appealing such a strategy may be in the abstract, it threatens to overload the capacity of federal agencies, facilitate state resistance, and encourage extensive litigation over its implementation, virtually ensuring that few of its goals would be achieved within the desired time frame.

To be sure, adopting standards directly into statute can protect regulatory measures against some legal challenges. Such standards may be more difficult to revise over time, however, to account for economic, technological or environmental changes. For this reason, some regulatory statutes impose a first round of regulatory standards expressly, while requiring the implementing agency to reconsider and revise the standards on a periodic basis. This is a strategy that has been used in the CAA and is incorporated in portions of the CLEAN Future Act discussion draft.

The enactment of major new regulatory legislation inevitably triggers a flurry of litigation as federal agencies begin to unpack and apply the law’s provisions. This was true of the 1990 Clean Air Act, the Employee Retirement Income Security Act (ERISA), and the Affordable Care Act, just to name a few. As a general rule, the more complex, controversial and costly a piece of legislation, the more litigation it will produce. Delegating authority to administrative agencies to adopt regulations implementing the statute is a further spur to litigation, as the promulgation of each final rule presents a new opportunity to file suit. After all, with each regulatory decision, agencies risk pleasing one set of interested parties while angering another. And with each final agency action, those upset with the results have their opportunity to go to court.

The false promise of agency deadlines

Cognizant of the potential for administrative implementation to lag, Congress often imposes deadlines for agencies to act. Environmental agencies, and the EPA in particular, are among those subject to the greatest number of deadlines.⁴¹ Yet the inclusion of deadlines in legislation hardly ensures that agencies adopt measures on the congressionally preferred schedule. To the contrary, federal regulatory agencies routinely miss deadlines imposed by Congress, and judicial enforcement of statutory deadlines occurs after the fact, if at all.

40. The CLEAN Future Act discussion draft imposes this requirement on every federal agency as defined in the Administrative Procedure Act. As odd as it may sound, it is not clear how many agencies this encompasses, as it encompasses “each authority of the Government of the United States, whether or not it is within or subject to review by another agency.” 5 U.S.C. §551(1). According to the *Sourcebook of United States Executive Agencies*, this is somewhere between 100 and 600 separate entities. See ADMINISTRATIVE CONFERENCE OF THE UNITED STATES, SOURCEBOOK OF UNITED STATES EXECUTIVE AGENCIES, 2nd ed.(2018), at 12.

41. See Gersen & O’Connell, *supra* note 28, at 981, Table 2.

According to an analysis conducted by the R Street Institute, federal agencies failed to meet over half of the more than 1,400 deadlines imposed by Congress between 1995 and 2014.⁴² An earlier study by law professors Jacob Gersen and Anne Joseph O’Connell reported even worse findings, concluding that agencies met regulatory deadlines less than 30 percent of the time between 1988 and 2003.⁴³ A 2011 report by Public Citizen suggested an even deeper problem, finding that federal regulatory agencies missed statutorily imposed deadlines for over 75 percent of regulations reviewed.⁴⁴ This problem has persisted. Just last fall, California announced its intent to sue the Department of Energy for failing to meet mandatory deadlines to revise energy efficiency standards for 25 product categories.⁴⁵

The Administrative Procedure Act authorizes suits to compel agency action that has been “unlawfully withheld or unreasonably delayed,”⁴⁶ yet such suits do not appear to do much to increase agency alacrity. A GAO review of suits and settlements by the EPA found little evidence that such suits influenced the EPA’s regulatory priorities.⁴⁷ Nonetheless, the EPA (and the Office of Air and Radiation in particular) is subject to hundreds of court-imposed deadlines.⁴⁸

The Gersen-O’Connell study found that deadlines may increase the speed with which agencies act by approximately 100 days on average, but that this effect was not uniform across federal agencies, and represents only a 20 percent reduction in the time necessary to promulgate a rule.⁴⁹ In the case of the EPA, Gersen and O’Connell found that actions without mandatory deadlines took an average of 685 days to complete. Those with deadlines were not completed much faster, taking an average of 610 days.⁵⁰

The EPA routinely misses statutorily and judicially imposed deadlines under the CAA. A 2005 GAO study found that the EPA had missed 256 of 338 statutory deadlines imposed under the 1990 CAA Amendments.⁵¹ In other words, the EPA complied with the applicable statutory deadline less than 25 percent of the time. Similarly, a 2016 analysis found that the EPA failed to meet over 80 percent of the over 1,000 regulatory deadlines imposed under the Clean Air Act.⁵² On average, the required actions were late or outstanding by over four years. The EPA was somewhat timely

42. Scott Atherley, FEDERAL AGENCY COMPLIANCE WITH CONGRESSIONAL REGULATORY DEADLINES, R STREET POLICY STUDY 39 (August 2015), <https://www.rstreet.org/wp-content/uploads/2015/07/RSTREET39.pdf>.

43. Gersen & O’Connell, *supra* note 28, at 949-50 n.84 (reporting “the agency met the deadline in only 26.99% of the cases” reviewed.)

44. PUBLIC CITIZEN, PUBLIC SAFEGUARDS PAST DUE: MISSED DEADLINES LEAVE PUBLIC UNPROTECTED (June 2012), <https://www.citizen.org/wp-content/uploads/migration/public-safeguards-past-due-report.pdf>.

45. Press Release, “Attorney General Becerra Announces Intent to Sue Energy Department Over Failure to Update 25 Energy Efficiency Standards” (Aug. 10, 2020), <https://oag.ca.gov/news/press-releases/attorney-general-becerra-announces-intent-sue-energy-department-over-failure>.

46. See 5 U.S.C. §706(1).

47. See GAO, *Environmental Litigation*, *supra* note 38.

48. Gersen & O’Connell, *supra* note 28, at 981, Table 2.

49. *Id.* at 945.

50. *Id.* at 981, Table 2.

51. See U.S. GOV’T ACCOUNTABILITY OFFICE, CLEAN AIR ACT: EPA HAS COMPLETED MOST OF THE ACTIONS REQUIRED BY THE 1990 AMENDMENTS, BUT MANY WERE COMPLETED LATE, GAO-05-613 3-4 (2005).

52. See William Yeatman, *The EPA’s Dereliction of Duty: How the Agency’s Failure to Meet Its Clean Air Act Deadlines Undermines Congressional Intent*, Competitive Enterprise Institute (August 2016); <https://cei.org/wp-content/uploads/2016/08/William-Yeatman-EPA-s-Dereliction-of-Duty.pdf>.

in meeting its obligation to review State Implementation Plans, being just under two years late on average. When it came to emission regulations imposed on specific industrial sectors, however — the sorts of rules likely to be required by regulatory climate change legislation — the agency was late by more than seven-and-a-half years on average.

Outside groups can sometimes file lawsuits to force agencies to take overdue actions, but this is only a partial remedy. To take one relevant example, in December 2010 the EPA settled a lawsuit filed by environmental groups by agreeing to propose new regulations governing GHG emissions from new and existing power plants no later than July 26, 2011, and to promulgate final regulations by May 26, 2012.⁵³ Yet, as noted above, the resulting Clean Power Plan governing emissions from existing power plants was not proposed until 2014 and not finalized until 2015.

Agency delay is partially a function of workload and resources. Imposing deadlines on agencies to issue additional reports and adopt new regulations without increasing the personnel and resources available to complete such tasks is a recipe for failure. The mandated tasks may eventually be completed, but not particularly quickly, nor is it likely the agency can rapidly scale up its capabilities. If speed matters, piling additional obligations on the EPA and other environmental agencies does not seem like a particularly sensible strategy.

Uncooperative federalism

Much of federal environmental law adopts a “cooperative federalism” framework, through which the federal government seeks to enlist the cooperation or participation of state governments in the implementation and enforcement of environmental regulations. State regulatory agencies have more knowledge about local conditions and may be more responsive to local sensitivities and concerns. States also have the “boots on the ground” to monitor and implement various pollution control requirements. Accordingly, state agencies are often the front-line enforcers of federal environmental laws, and the federal EPA lacks the personnel or resources to substitute for or supplant state efforts.

Under existing Supreme Court jurisprudence, the federal government may not “commandeer” state governments to help implement a federal regulatory scheme.⁵⁴ State participation must be voluntary. Further, for cooperative federalism programs to be effective, states must be willing to affirmatively cooperate. Accordingly, many major environmental laws offer states the promise of financial assistance and the threat of preemptive federal regulation as a spur to “cooperation.” The extent of such inducements is limited, however, as the Supreme Court has warned Congress not to cross the line between inducement and coercion.⁵⁵

The CAA is among the federal environmental statutes that adopt a “cooperative federalism” model. Under the CAA, the federal government sets the underlying pollution and emission standards, leaving states with the primary obligation to develop plans for implementing and achieving the

53. U.S. EPA, “Settlement Agreements to Address Greenhouse Gas Emissions from Electric Generating Units and Refineries” (Jan. 19, 2017), <https://19january2017snapshot.epa.gov/sites/production/files/2013-09/documents/settlementfactsheet.pdf>.

54. See, e.g., *Murphy v. Natl. Collegiate Athletic Assn.*, 138 S.Ct. 1461 (2018); *New York v. United States*, 505 U.S. 144 (1992).

55. See, e.g., *NFIB v. Sebelius*, 567 U.S. 519 (2012).

federal requirements. Failure to comply within the applicable timeframe can result in the threat of a preemptive federal plan, increased pollution control requirements, and the loss of federal funds that support state-level environmental programs and highway construction.⁵⁶ Such sanctions are not always imposed, however, as the EPA is reluctant to take over too many state responsibilities or provoke too great a local backlash.⁵⁷ As a consequence, state recalcitrance may frustrate the achievement of federal requirements even if such resistance does not lead to a fight in court.

Federal regulation of GHGs, particularly from stationary sources, is likely to rely on cooperative federalism to some degree, whether pursued under the CAA or new federal legislation. If the EPA adopts federal standards for power plants under the CAA, as with the Obama administration's CPP, these standards will be implemented by state regulators — or at least by those willing to cooperate. Some states were happy to go along when the CPP was promulgated. Others rushed to court and eventually got the program placed on hold.

The proposed CLEAN Future Act would make even greater use of the cooperative federalism model, and would face serious constitutional challenge. Title VIII of the proposed bill would require every state to adopt a state climate plan that would lead to dramatic GHG emission reductions on a set schedule until the act's emission control targets were achieved in each state. Through a system modeled on elements of the CAA, this proposal would obligate states to comply or risk limits on federal projects within the state (under the Clean Air Act's "conformity" provisions) and the imposition of a "backstop carbon fee." Implementing these provisions would require extensive rulemakings by the EPA, and surely invite legal challenge on the grounds that the threat of a carbon fee is coercive, much like the threat to cut off federal Medicaid funds was found to be in *NFIB v. Sebelius*, the landmark case on the ACA.⁵⁸

Congressional efforts to induce state cooperation are likely to provoke serious constitutional challenges. While many such measures may appear constitutional under current doctrine, much the same was said about the individual mandate when the ACA was adopted. Many legal academics were dismissive of claims that the individual mandate, in particular, pressed against the outer bounds of federal constitutional authority.⁵⁹ Yet five justices ultimately concluded that Congress lacks the regulatory authority to compel individuals to purchase qualifying health insurance, even if Congress may impose a tax on the failure to purchase such insurance.⁶⁰

The unprecedented nature of a federal mandate requiring all individuals to purchase a specified good or service was part of what made the legal challenges viable. While some thought such a mandate was constitutionally indistinguishable from other assertions of federal authority that had

56. For a critical examination of the Clean Air Act sanctions provisions, and potential constitutional objections thereto, see Jonathan H. Adler & Nathaniel Stewart, *Is the Clean Air Act Unconstitutional? Coercion, Cooperative Federalism and Conditional Spending after NFIB v. Sebelius*, 43 *ECOL. L.Q.* 671 (2016).

57. The CAA authorizes the filing of citizen suits to prompt EPA enforcement of the Act's terms, including those relating to sanctions on noncooperating states.

58. 567 U.S. 519 (2012). For a discussion of how *NFIB* may apply to CAA programs, see Adler & Stewart, *supra* note 56.

59. See David A. Hyman, *The Supreme Court's PPACA Decision: Something Went Wrong on the Way to the Courthouse*, 38 *J. HEALTH POL. POL'Y & L.* 243, 245 (2013) (noting "law professors were openly contemptuous of the suggestion that the ACA raised serious constitutional issues").

60. See *Nat'l Federation of Indep. Bus. v. Sebelius*, 567 U.S. 519 (2012).

previously been upheld, five justices concluded otherwise, in part, because of a perceived need to vindicate the principle that federal power has judicially enforceable limits.⁶¹ In this regard, *NFIB* is not an isolated example. Across a range of doctrines, the Supreme Court seems reluctant to validate the constitutionality of new assertions of federal regulatory authority. This was one reason the Court invalidated the ACA's Medicaid expansion, and it was the basis upon which the Court concluded that the legislatively-mandated structures of the Public Company Accounting Oversight Board and Consumer Financial Protection Bureau were invalid.⁶²

This means that unprecedented expansion of federal regulatory authority to address matters traditionally left in the hands of state or local governments, or expansions of existing inducements to state cooperation, are likely to be particularly vulnerable to constitutional challenge. Even those measures that may seem to fit comfortably within conventional understandings of existing constitutional doctrine may be at risk.

Comparing regulatory strategies with fiscal alternatives

Not all climate policy initiatives are equally vulnerable to legal challenge and administrative delay. As a general matter, fiscal tools are less vulnerable to legal challenge than are regulatory measures. Subject to a few exceptions not relevant here, taxpayers lack standing to challenge the legality of federal spending. So while there may be administrative hurdles to allocating and deploying resources, and navigating the relevant scoping, environmental impact and approval processes, the spending itself is rather immune from legal challenge.

Taxes may be politically controversial, but they are also less vulnerable to legal challenge than regulatory measures, and are easier to implement. As illustrated by the Supreme Court's decision in *NFIB*, the federal government has broader authority to impose taxes than to regulate private activity.⁶³ Federal taxes on fuel consumption are clearly constitutional, so it is unlikely there would be any basis to challenge the constitutionality of a carbon tax, provided it was set by statute. (Whether courts would uphold legislation delegating the authority to set tax rates to a federal agency, on the other hand, is an interesting question.)

A carbon tax would also be easier to implement than equivalent regulatory measures, or even than some sort of cap-and-trade regime, such as that proposed in the Waxman-Markey bill in 2009. Adopting either a system of standards and mandates or a cap-and-trade system for GHGs requires making many more discrete decisions about regulatory design and implementation than does a carbon tax. Each such decision increases the complexity of the endeavor, and creates opportunities for rent-seeking, political manipulation and, if such decisions are delegated to an administrative agency, administrative delay and subsequent litigation.

While a tax can be designed to be relatively uniform, and is therefore easier to draft into legislative language, implementing a trading scheme necessarily requires many decisions about how to

61. See Jonathan H. Adler, *The Conflict of Visions in NFIB v. Sebelius*, 62 *DRAKE L. REV.* 101 (2014).

62. See *Free Enterprise Fund v. PCAOB*, 561 U.S. 477, (2010); *Seila Law v. Consumer Financial Protection Bureau*, 140 S.Ct. 2183 (2020). See also Jonathan H. Adler, *Conservative Minimalism and the Consumer Financial Protection Bureau*, *U. CHI. L. REV. ONLINE* (2020), <https://lawreviewblog.uchicago.edu/2020/08/27/seila-adler/>.

63. See *NFIB*, 567 U.S.

allocate and value allowances – e.g., are the allowances to be allocated by auction, lottery, or past behavior? If by lottery, how is participation determined? If by past behavior, what behavior counts? What is the relevant time period? Is it purely retrospective, or partially prospective? What metric is to be used to evaluate comparable, but not identical, activities? Must some allowances be discounted in certain sectors to account for monitoring or enforcement problems? And so on. Users of allowances are not the only ones with something to gain through rent-seeking. Those who seek to trade or broker allowances can also capture rents by influencing program design. This is true in the regulatory context as well. Each discrete judgment about what actions or technologies will satisfy the relevant standard, how standards will be implemented and enforced, creates an entry point for rent-seeking and manipulation, and this creates incentives to manipulate or influence the administrative process. Small decisions on the margin, such as how to account for slight changes in fuel composition, will appear to be minor technical decisions, but can actually mask serious efforts to obtain economic advantage through regulation.⁶⁴

The degree of administrative complexity also affects the speed at which a climate policy can be adopted. British Columbia's carbon tax system was adopted and implemented in less than six months – a fraction of the time it typically takes the EPA to adopt a single major rule. By comparison, it took the EPA several years to draft and adopt the regulations implementing the Clean Air Act's acid rain tradable emission allowance program, even though this program only governed a discrete number of large polluting facilities and many key determinations, such as the requirements for allocating allowances, were written into the statute.⁶⁵ The size and scale of the acid rain program was also a far cry from what would be required to control emissions of greenhouse gases. British Columbia's carbon tax, on the other hand, was economywide and began creating incentives to reduce carbon use almost right away.

Conclusion

Insofar as climate change calls for quick and dramatic action to curb GHG emissions and clear a path toward ultimate atmospheric stabilization of GHGs in the atmosphere, federal emission control regulation is an inadequate prescription. Whatever the theoretical advantages of such an approach, it would face significant practical obstacles, administrative delays, and legal vulnerabilities. Consideration of the broader constitutional and administrative-law concerns counsels shelving federal regulatory strategies in favor of fiscal instruments, such as a carbon tax, that can be implemented quickly and with fewer legal risks. If climate change is an urgent problem, policymakers should choose their policy instruments accordingly.

Acknowledgements

The author would like to thank those who offered comments on drafts of this paper, including David Bookbinder, James Coleman, Joseph Majkut, Richard Pierce, Shuting Pomerleau, Nader Sobhani, Steven Teles, and Christopher Walker. Any errors or omissions remain the responsibility of the author.

64. The history of the oxygenated gasoline and reformulated gasoline programs under the Clean Air Act provides numerous examples of this phenomenon.

65. See Richard Schmalensee & Robert N. Stavins, *Lessons Learned from Three Decades of Experience with Cap and Trade*, 11 REV. OF ENVTL ECON & POLY 59, 61 (2017).