THE JUDICIAL CARBON TAX: RECONSTRUCTING PUBLIC NUISANCE AND CLIMATE CHANGE

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This Article seeks to reconstruct the public nuisance climate change cases Connecticut v. AEP and California v. General Motors to show that, while hardly perfect, nuisance litigation could form a reasonable basis for climate change regulation, at least as much as some of the other imperfect alternatives so far proposed. This nuisance system has promise because, as outlined here, it essentially becomes a carbon tax—precisely the policy instrument that many economists say is the best form of regulation but is routinely dismissed as politically unfeasible. The difference is that it is judicially, not legislatively, imposed.

I do not claim that the nuisance system is superior to legislation, but rather that it is a reasonable substitute in the absence of political action. More hopefully, I suggest it might provide a basis for getting the political process to respond to the climate crisis. Put another way, we might look at public nuisance litigation as a useful support for political progress. Common law judicial activism, then, does not undermine the democratic process but rather enhances it.

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INTRODUCTION

Attorneys excel at presenting parades of horribles, and judges often go along. More than a century ago, the New York Court of Appeals warned that allowing recovery for mass tort claims would “create a liability which would be the destruction of all civilized society.”¹ The power producer and automaker defendants in the climate change actions for public nuisance might be expected to say the same thing (albeit more obliquely). In the Second Circuit hearing for Connecticut v. American Electric Power Co.,² however, the power producers’ counsel raised an even more terrifying spectre: “[T]here is a law review article out there laying out the whole strategy for how to regulate through the courts global carbon dioxide emissions that have profound implications for our entire society.”³

But like the predictions of civilization’s death, advocates’ analysis of scholarship’s impact is greatly exaggerated. The plaintiffs’ cases have not fared well. Both cases involved state attorneys general suing carbon emitters for public nuisance. In Connecticut v. American Electric Power, eight states sued six leading producers of electric power seeking injunctive relief,⁴ and in California v. General Motors Corp.,⁵ California sued six major American

¹. Ryan v. N.Y. Cent. R.R. Co., 35 N.Y. 210, 217 (N.Y. 1866). Lest the reader think that this is rhetoric of a bygone era, see Lawson v. Mgmt. Activities, Inc., 81 Cal. Rptr. 2d 745, 748 (Cal. Ct. App. 1999) (arguing that there is no such thing as the independent tort of negligent infliction of emotional distress, and stating “[i]ndeed, civilized life would not be possible if there were such a tort”).
². (AEP), 406 F. Supp. 2d 265 (S.D.N.Y. 2005). As of this writing, an appellate opinion is still pending.
automakers, seeking damages for harms caused by climate change. But the district courts dismissed both actions as raising a nonjusticiable political question.

Many scholars seem to agree that the political branches should solve the climate change problem. The most recent high-level publication on climate change regulation, which gathered the leading thinkers in the field from across the globe, mentioned litigation exactly once—and that in passing. Legal academics have addressed the public nuisance issue more frequently, but most of them seem skeptical of the notion. The prevailing scholarly view remains that “nuisance litigation is ill-suited to other than small-scale, incidental, localized, scientifically uncomplicated pollution problems.”

I hope to show in this Article that, while hardly perfect, nuisance litigation could form a reasonable basis for climate change regulation, at least as much as some of the other imperfect alternatives so far proposed. This nuisance system has promise because, as outlined here, it essentially becomes a carbon tax—precisely the policy instrument that many economists say is the best form of regulation but is routinely dismissed as politically unfeasible. The difference is that it is judicially, not legislatively, imposed.

I do not claim that the nuisance system is superior to legislation, but rather that it is a reasonable substitute in the absence of political action. More hopefully, I suggest it might provide a basis for getting the political process to respond to the climate crisis. Put another way, we might look at public nuisance litigation as a useful support for political progress. Common law judicial activism, then, does not undermine the democratic process but rather enhances it.

6. See id.; AEP, 406 F. Supp. 2d at 265. A third case, Comer v. Murphy Oil, No. 05-CV-436 (S.D. Miss. dismissed Aug. 30, 2007), was dismissed on August 30, 2007 by oral judgment and then was appealed to the Fifth Circuit.

7. See ARCHITECTURES FOR AGREEMENT: ADDRESSING GLOBAL CLIMATE CHANGE IN THE POST-KYOTO WORLD (Joseph E. Aldy & Robert N. Stavins eds., 2007) [hereinafter ARCHITECTURES FOR AGREEMENT].

8. See Joyeeta Gupta, Beyond Graduation and Deepening: Toward Cosmopolitan Scholarship, in ARCHITECTURES FOR AGREEMENT 116, 124, supra note 7.

9. See Thomas W. Merrill, Global Warming as a Public Nuisance, 30 COLUM. J. ENVTL. L. 293, 332–33 (2005); Daniel A. Farber, Basic Compensation for Victims of Climate Change, 155 U. PENN. L. REV. 1605, 1649 (2007) (“Realistically, the greatest function of litigation may be to prod legislative action.”). An important exception, about which I will have more to say, is Kirsten H. Engel, Harmonizing Regulatory and Litigation Approaches to Climate Change Mitigation: Incorporating Tradable Emissions Offsets Into Common Law Remedies, 155 U.PA. L. REV. 1563 (2007).


The Article proceeds in six parts and comprises six major points:

Strict Liability. In climate change litigation, public nuisance is best conceptualized as a strict liability tort. I attempt to contribute to the debate by moving past strictly doctrinal analysis and presenting some theoretical reasons why in our consideration of climate change, policy considerations also favor strict liability.

Damages. The theoretical basis for strict liability, as well as a host of policy considerations, strongly favors damages, and not equitable relief, as the proper remedy. This suggests that California’s approach (which seeks damages) is superior to that of the eastern attorneys general (which seeks an injunction). It also reveals that public nuisance litigation essentially serves as the judicial form of the sort of carbon tax overwhelmingly favored by economists and policy analysts. This tax-based nuisance policy suggests that the causation theories advanced by the attorneys general might not be the best approach.

State Courts. The plaintiffs and defendants all appeared to accept that climate change litigation should be based upon federal common law, but a careful examination of precedent and the structure of the Clean Air Act reveals that state law forms the more legally sound basis of the action. This also has a series of salutary policy consequences, most particularly in its ability to enhance the workings of legislatures and allow for regional policy diversity.

Defendants. The primacy of state law, and the actual administration of any carbon tax, suggests that the attorneys general have pursued the wrong defendants: A more effective and legally sound action would have focused on the pursuit of upstream carbon producers.

Judicial legitimacy and competence. I argue that courts are both legitimate and competent to handle large-scale climate change litigation, and suggest that public nuisance cases are best conceptualized as a claim for enhanced risk of future damages. I also offer ways in which the judicial carbon tax can be integrated with state cap-and-trade systems.

International Implications. It is perhaps somewhat churlish to criticize those who have sued the world’s largest automakers and the nation’s largest power producers for not going far enough. But critics of domestic climate change regulation argue that without reducing emissions from China and India, any internal measures are doomed to fail. I suggest ways in which public nuisance litigation can affect these emissions, and use the example of Tata Motors’ new proposal to put ten million inexpensive automobiles on Indian roads as an example of how U.S. courts can achieve jurisdiction.
The system outlined in this Article hardly has the elegance of unified climate change regulatory architectures, but one might very well wonder whether any more is possible. This point does not merely concern the issue of international architecture; it reflects the unwieldy nature of a global issue that reaches the highest stakes imaginable. Henry Jacoby rejects the term “policy architecture” as misleading, because such coherence is politically impossible. Instead, he prefers the notion of a “climate favela,” denoting what he calls the “ramshackle neighborhoods . . . that dot the hillsides of Rio de Janeiro.” But even Jacoby’s realism is over optimistic. A favela is not a “ramshackle neighborhood”; it is a slum. If those trying to create a unified climate policy architecture can do little better than a slum, perhaps we should reexamine the possibility of judicial action.

I. THE MEANING OF NUISANCE

“There is perhaps no more impenetrable jungle in the entire law,” Prosser famously noted, “than that which surrounds the word ‘nuisance’:

It has meant all things to all people, and has been applied indiscriminately to everything from an alarming advertisement to a cockroach baked in a pie. There is general agreement that it is incapable of any exact or comprehensive definition. Few terms have afforded so excellent an illustration of the familiar tendency of courts to seize upon a catchword as a substitute for any analysis of a problem.

Prosser overstated his case, but the climate change public nuisance cases have demonstrated his correctness on the fundamental issue. The doctrine is vague, and the lack of major public nuisance decisions makes traditional analogical reasoning difficult if not impossible. The Restatement is of little assistance; it defines public nuisance as “an unreasonable interference with a right common to the general public,” which begs the question of the

15. Many legal doctrines receive similar complaints; the winner for incoherence might well be state action doctrine, which Charles Black famously described as a “conceptual disaster area.” Charles L. Black, Jr., The Supreme Court 1966 Term, Foreword: “State Action,” Equal Protection, and California’s Proposition 14, 81 HARV. L. REV. 69, 95 (1967).
right to begin with. Others have capably argued why climate change, perhaps the greatest environmental threat humanity has ever faced, should constitute a public nuisance, and I will not rehearse those arguments here.

There is, however, something of a lacuna in the discussion. As its formulation suggests, public nuisance oscillates between strict liability and negligence. If the defendant does cause unreasonable harm, then it is liable no matter how much it is attempting to be more careful and no matter what its burden may be in reducing the danger. This result would suggest strict liability. On the other hand, we might very well read the notion of unreasonable harm to imply that the defendant meeting an ordinary standard of care should be held harmless. This result would suggest a negligence standard.

Precedent helps us little in resolving the issue, which should not come as a surprise given the internal tension in the standard. The plain language of the Restatement itself tilts toward strict liability, as it seems to reject a balancing test. Several of the cases purporting to analyze the question, however, have leaned toward negligence, as do some Restatement comments. The courts in both California v. General Motors Corp. and Connecticut v. American Electric Power Co. placed great weight on this point, holding that the entire question

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19. According to the Restatement:
   Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:
   (a) Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
   (b) whether the conduct is proscribed by a statute, ordinance, or administrative regulation, or
   (c) whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right. RESTATEMENT (SECOND) OF TORTS § 821B(2).
20. See RESTATEMENT (SECOND) OF TORTS § 821B cmt. e, which states:
   By analogy to the rules stated in § 822 [for private nuisance], the defendant is held liable for a public nuisance if his interference with the public right was intentional or was unintentional and otherwise actionable under the principles controlling liability for negligent or reckless conduct or for abnormally dangerous activities. Liability was not normally imposed for a pure accident that did not fall into one of the three traditional categories of tort liability.
was political because no judicial administrable standards existed to determine reasonableness and that courts should not engage in policy balancing.

Although the weight of authority leans to strict liability, the district court's trepidation is telling. Given the enormity and novelty of the climate change crisis, even the most audacious judge might be forgiven for seeking firmer support for strict liability than cases from very different times and for very different issues. Moreover, although public nuisance is not confined to criminal activity, illegality is an important factor in determining whether something is reasonable, and the overwhelming presence of carbon emissions in the contemporary economy means that to be successful, plaintiffs should show stronger reasons why strict liability is appropriate.

Modern advocates of strict liability rely heavily on Guido Calabresi's notion of general deterrence, which at its simplest level means making activities pay the costs of the damages that they "cause." The central intuition here is one of cost-internalization. But the scare quotes around "cause" are there for a reason, because the term is essentially metaphysical. As Calabresi aptly puts it, what is a cost of what? His solution is in the form of guidelines to determine the cheapest cost avoider, and then applying

23. General Motors Corp., 2007 WL 2726871, at *8, *11–12 ("[T]he Court is left to make an initial decision as to what is unreasonable in the context of carbon dioxide emissions. . . . [T]he adjudication of Plaintiff's claim would require the Court to balance the competing interests of reducing global warming emissions and the interests of advancing and preserving economic and industrial development. The balancing of these competing interests is the type of initial policy determination to be made by the political branches, and not this Court.") (citation omitted); see also AEP, 406 F. Supp. 2d at 272–73 (arguing that balancing represents a political question). Interestingly, the AEP court never sought to determine whether a balancing test was even required in the public nuisance context, but seemed to assume so. AEP cited Chevron U.S.A., Inc. v. Nat'l Res. Def. Council, 467 U.S. 837 (1984), for the necessity of the balancing test—which concerns the Clean Air Act, 42 U.S.C. § 7401 (2000), not public nuisance law. See AEP, 406 F. Supp. 2d at 272.

24. See, e.g., New York v. Shore Realty Corp., 759 F.2d 1032, 1051 (2d Cir. 1985) (stating that the defendant "is liable for maintenance of a public nuisance irrespective of negligence or fault") (second emphasis added); Commonwealth v. Barnes & Tucker Co., 319 A.2d 871, 883 (Pa. 1974) ("The absence of facts supporting concepts of negligence, foreseeability or unlawful conduct is not in the least fatal to a finding of the existence of a common law public nuisance.").

25. Even a partial excerpt from Proser's litany should give us pause about some analogies: The term . . . . includes interferences with the public health, as in the case of a hoggen, the keeping of diseased animals, or a malarial pond . . . with the public peace, as by loud and disturbing noises, or an opera performance which threatens to cause a riot; with the public comfort, as in the case of bad odors, smoke, dust and vibration; with public convenience, as by obstructing a highway or a navigable stream, or creating a condition which makes travel unsafe or highly disagreeable, or the collection of an inconvenient crowd; and in addition, such unclassified offenses as eavesdropping on a jury, or being a common scold.

Keeton et al., supra note 14, § 90 (citations omitted).

these to the issue of automobile accidents. First, he noted that one of the parties may have better information about the accident risks involved in the situation: “[T]o an individual the chance of being injured or of injuring is an unknown; to an auto manufacturer it is a known statistic.”

Second, “one activity may be able to insure more cheaply than the other.” Third, “placing the cost on one activity may be more likely to result in efficient allocation of the cost to subcategories of activities than placing the cost on the other.” Fourth:

[Placing the cost on one activity rather than another may result, for political or practical reasons, in removing it from both, thus destroying market deterrence altogether. If liability is placed on drivers, but they insure inadequately and as a result fail to pay damages, or if the government steps in and pays the damages out of a generalized social insurance fund, neither the drivers nor the manufacturers will include these damages in future prices.]

Finally, in best Coasean fashion, Calabresi suggests that we can place liability on the party that is most likely to contract around the problem if the liability determination is wrong.

Looking at these guidelines in the case of climate change, the defendant automakers or power producers (or, as I suggest below, fossil fuel producers) are cheaper cost avoiders than consumers. Let us suppose that an individual consumer would like to insure herself against damage from climate change. Could she purchase a policy to do so? Not likely: The market for such policies is rudimentary at best, and subject to gross inefficiencies. Although we have sophisticated economic models concerning overall climate change damage, pinpointing individual risk factors at the current level seems impossible, especially since so much of this risk is not the result of individual behavior, but rather systemic factors.

The third factor seems clear enough, especially in the case of power production. A power producer faced with damages for carbon emissions can suballocate its costs to dirty power production and move into renewables; an automaker can move into hybrid vehicles and reduce the production of SUVs and diesel trucks. A consumer, on the other hand, rarely has the information

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28. Id. at 606.
29. Id.
30. Id.
31. Id. at 607.
32. Id. at 607.
33. See infra Part IV.
to choose where her power is coming from, especially if her options are limited by the power company. In terms of Calabresi’s fourth factor, as disasters and other climate change impacts accumulate, governments will have little choice but to step in, leaving market deterrence unavailable. The fifth factor also militates strongly against the defendants. Asking millions of consumers to bribe either automakers or power producers to change their behavior is quite unrealistic.  

One could easily ask why consumer demand for lower-carbon products could not achieve the same thing, thus making consumers as effective bribers of defendants as vice versa. The short answer is that it could—but it would be far more uncertain. Massive coordination problems would occur: One consumer would have little reason on her own to start demanding lower-carbon products if she was uncertain whether millions of others would follow along. This is why, although a market in such products is developing, it has been slow and halting. The point isn’t that bribing the defendants is impossible, but rather that it involves far greater transactions costs than the other alternative.

Not all tort theorists agree with Guido Calabresi, of course. Most notably, Richard Posner has long argued for the centrality and vitality of negligence as the touchstone of tort law, which would imply that particular weight be placed on the reasonableness language in the Restatement formulation. But even Posner might adopt strict liability in a climate change case.  

Posner’s basic argument for the primacy of negligence rests on uncertainty as to the cheapest cost avoider. This uncertainty derives from a central distinction: levels of care—the precautions an actor takes when engaging in an activity—versus levels of activity—the actor’s decisions about whether to engage in the activity in the first place and how much of it to do. For example, a driver’s level of care concerns the speed at which she drives, how much she pays attention to other drivers, and so forth. Her level of activity is the amount she drives, or whether she decides to take an entirely different mode of transportation altogether.

34. Ironically, the best way to change consumer behavior is to place the burden on the defendants, which will raise prices. Note that this comparison between consumers and defendants does not discuss the most proper defendant. I defer that discussion to Part IV. I only hope to show that plaintiffs are not the cheapest cost avoider, which militates in favor of a strict liability approach.

35. My colleague Ann Carlson has discussed the difficulties of attempting to get consumers to consistently undertake these sorts of low-payoff, high-frequency decisions. See Ann E. Carlson, Recycling Norms, 89 CAL. L. REV. 1231 (2001).


Posner acknowledges that a general rule of strict liability enables potential injurers to “take into account possible changes in activity level,” unlike negligence:

Suppose railroads and canals are good substitutes in transportation but railroads inflict many accidents that cannot be avoided by due care by either the railroad or potential accident victims, and canals none. Were it not for these accident costs, railroads would be 10 percent cheaper than canals, but when these accident costs are figured in, railroads are actually 5 percent more costly. Under a rule of negligence liability, railroads will displace canals even though they are the socially more costly method of transportation.39

In such a situation, strict liability would clearly be optimal, because it would force the railroad operator to internalize its costs, thus increasing prices, and thus driving the transportation market toward canals. Without such internalization, people would use railroads and thus cause more accidents. And a court applying negligence principles would not assign liability because railroads operators were being careful.

So why don’t we always have strict liability? “The problem with using this analysis to support a general rule of strict liability,” says Posner, “is that changes in activity level by victims are also a method of accident avoidance, and one that is encouraged by negligence liability but discouraged by strict liability.”40 In addition, if defendants can reduce accidents to optimal levels by simply increasing their level of care, then strict liability is unnecessary.41 Thus, “if a class of activities can be identified in which activity-level changes by potential injurers are the most efficient method of accident prevention, there is a strong argument for imposing strict liability on the people engaged in those activities.”42

So where do the public nuisance cases fit? Auto production and power generation represent paradigmatic examples where increasing the level of care, traditionally conceived, will not reduce the level of damage.43 If a

38. Id. at 178.
39. Id.
40. Id. at 179.
41. See Ind. Harbor Belt R.R. v. Am. Cyanamid Co., 916 F.2d 1174, 1180–81 (7th Cir. 1990) (Posner, J.) (“It is easy to see how the accident in this case might have been prevented at reasonable cost by greater care on the part of [the defendants]. It is difficult to see how it might have been prevented at reasonable cost by a change in the activity of [the defendants]. This is therefore not an apt case for strict liability.”).
42. Posner, supra note 37, at 179.
43. Admittedly, levels of care and levels of activity blur at the margin. Consider the example that Posner uses about tearing down a building. One could use blasting or use a wrecking ball. These, Posner says, would be different levels of activity. If one chooses implosion, being extremely
company manufactures a perfectly well-functioning gasoline-powered internal combustion engine automobile, telling it to be more careful in its production methods does not truly get to the heart of the problem. If a regulator or a court was to require an automaker to produce Super Ultra Low Emissions Vehicles (SULEVs) or Zero Emission Vehicles (ZEVs)\(^{44}\) in lieu of standard automobiles, no one would infer that it was being told to be more careful. Instead, it would be seen as being ordered to change its activity.

Similarly, if a power company operates the most high technology coal-fired plant available, saying that it should generate its megawatts from wind, solar or other renewables hardly implies that it is not being sufficiently careful. Rather, it suggests that it is in the wrong line of work: It should be doing something else, which is a typical way of saying it should change its activity level. Fossil fuel producers would face similar considerations.\(^{45}\)

What about victims? Posner suggests negligence generally trumps strict liability because most accidents derive from a convergence of causes. Often, accident victims can avoid accidents by increasing their level of care or changing their level of activity, and this avoidance will be less costly than fastidious about safety would constitute an increased level of care. See Am. Cyanamid, 916 F.2d at 1177–78. But this might best be seen as a choice of characterization. Why could we not say that the activity is tearing down a building, and that the failure to use the less-dangerous wrecking ball is itself a lack of due care? See Stephen G. Gilles, Rule-Based Negligence and the Regulation of Activity Levels, 21 J. LEGAL STUD. 319, 329–32 (1992). At some point, the discussion becomes circular; If we say that in these circumstances, blasting when one could use a wrecking ball is negligence, then that is just another way of saying that strict liability applies.

44. SULEV stands for Super Ultra Low Emissions Vehicle, which is a conventionally powered or gas-electric hybrid vehicle designed to produce minimal air pollution at their point of use, typically 90 percent less than that of an equivalent ordinary full gasoline vehicle. ZEV stands for Zero Emission Vehicle. Recently, the problems with pure ZEV technology have led to the adoption of so-called PZEVs, or Partial Zero Emission Vehicles, which have near-zero evaporative emissions and emission control equipment with a 15-year/150,000 mile warranty. See Air Res. Bd., Cal. Envtl. Prot. Agency, 2005 Zero Emission and PZEV Credit Vehicles, http://www.arb.ca.gov/msprog/ccvl/2005sulevpzevlist.htm (last visited Apr. 30, 2008).

45. See G.J. Leasing Co. v. Union Elec. Co., 54 F.3d 379, 386 (7th Cir. 1995). Judge Posner writes:

Keeping a tiger in one’s backyard would be an example of an abnormally hazardous activity. The hazard is such, relative to the value of the activity, that we desire not just that the owner take all due care that the tiger not escape, but that he consider seriously the possibility of getting rid of the tiger altogether; and we give him an incentive to consider this course of action by declining to make the exercise of due care a defense to a suit based on an injury caused by the other—in other words, making him strictly liable for any such an injury.

Id.

Posner’s reference to balancing should not be taken to reflect a strict liability test; it instead refers in this case to RESTATEMENT (SECOND) OF TORTS \(\text{§}\ 520(f)\) (1979), which, although ostensibly a part of strict liability, reflects a balancing test that runs counter to the rest of the section. See KEETON ET AL., supra note 14, \$ 78. The point, rather, is that strict liability forces an examination of proper activity levels.
activity-level changes by injurers. But it is hard to see how increased levels of care from victims could avoid climate change. While theoretically, changed activity levels by consumers might reduce carbon emissions, such a scenario runs into the same overwhelming collective action problems discussed earlier.

All of this provides a plausible, credible case that strict liability forms a solid basis for a public nuisance claim in climate change cases. Calabresi and Posner hardly represent all economically oriented torts scholars, but they do represent a fairly broad range ideologically. Moreover, when using Posnerian theory yields a pro-strict liability result, it shows that there is a very strong case.

II. THE RIGHT REMEDY

If strict liability is justified in terms of general deterrence, then it seems equally clear that the Connecticut v. American Electric Power Co. plaintiffs are quite wrong to ask for an injunction. An injunction represents "specific deterrence"—"deciding collectively the degree to which we want any given activity, who should participate in it, and how we want it done." Cost-internalizing damages, as were asked for in California v. General Motors Corp., are the way to go because they do not tell the defendant what to do; instead, they leave it to the defendant to determine how to respond—precisely the notion of general deterrence.

Favoring damages represents far more than a theoretical point, however. For decades, scholars have argued that courts lack the institutional competence to manage such an injunction. Indeed, the most important

46. This point was originally developed by my late colleague Gary Schwartz, who suggested that a comparative fault system might incentivize cooperation between the plaintiff and the defendant to avoid an accident. See Gary T. Schwartz, Contributory and Comparative Negligence, 87 YALE L.J. 697, 705–07 (1978).
48. CALABRESI, supra note 26, at 68.
50. As Calabresi notes, the general deterrence approach:

51. See, e.g., DONALD L. HOROWITZ, THE COURTS AND SOCIAL POLICY 264–70 (1977); Peter H. Schuck, Judging Remedies: Judicial Approaches to Housing Segregation, 37 HARV. C.R.-C.L. L. REV. 289 (2002). Although Horowitz' work is dated, contemporary scholars cite it as the standard
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works criticizing alleged judicial activism seemingly assumes that all remedies are equitable. *Connecticut v. American Electric Power Co.*

appears to be tailor-made for this sort of criticism: the state plaintiffs there were asking a federal judge essentially to take most of the American power grid into a form of receivership—a breathtaking assertion of judicial power that hardly figures to find favor with the federal judiciary.

Damages remedies represent a far less intrusive—and thus far less complex—method of climate change regulation. Suppose that a court orders the power producers to reduce their emissions by a specified amount, and like institutional defendants everywhere, the companies insist that they are unable to do so. What follows is a series of hearings and negotiations, with probably very little progress. Damages, however, simply require that the companies write a check.

Kirsten Engel has given the most thought to remedies in the nuisance cases, and comes down on the side of equitable relief. She argues that in lieu of injunctions, courts should order abatement by requiring emitters to purchase third-party generated emissions offset credits. In particular, she favors the purchase of emissions allowances through the European Union’s Emissions Trading System (ETS), a cap-and-trade plan that she says is a sort of “pre-approved” credit market. There is a good deal to be said for Engel’s proposal, particularly in its effort to piggyback onto an already-existing system for climate change regulation. Yet it seems to raise more problems than it solves.

First, it relies upon the integrity of the EU system in order to achieve reductions. But the EU’s system has been unable to demonstrate any real progress, mainly because emissions allowances were set too high to achieve any reductions. EU nations are still resisting the use of permit auctioning, essentially allowing major emitters to maintain business as usual. To the extent that the ETS allowances will become more stringent, European work in the field. See, e.g., CASS R. SUNSTEIN, LEGAL REASONING AND POLITICAL CONFLICT 199 n.11 (1996).


53. Defense attorneys argue that the AEP plaintiffs are “effectively seeking the court to require the defendants to act as if the U.S. Senate had ratified the Kyoto Protocol and the Environmental Protection Agency (EPA) had issued implementing regulations to affect Kyoto’s objectives.” Jeffrey A. Smith, *Climate Change in the U.S. Courts*, 14 ENVTL. LIABILITY 211, 215 (2006), available at http://www.crawath.com/attachments/F8D6CA46E757368552572B30068869.pdf.

54. See PETER H. SCHUCK, SUING GOVERNMENT: CITIZEN REMEDIES FOR OFFICIAL WRONGS 14–18 (1983) (noting that damages represent a “nonintrusive” remedy, while injunctions are “intrusive”).

55. See Engel, supra note 9.

56. See id. at 1599–1603.
emitters are likely to make up for it through generated credits under the Clean Development Mechanism (CDM), a Kyoto Protocol institution whereby emissions credits are generated through the development of clean energy projects in the developing world.\textsuperscript{57} It sounds like a good idea, and it is; but it is also one of the most problematic of all bases for climate change regulation, for it relies upon a necessarily problematic notion of a baseline in order to measure reductions. Not surprisingly, the best analyses of CDM have concluded that it failed on virtually any performance metric, and indeed has created perverse political mechanism that will inhibit future emissions reductions.\textsuperscript{58} This conclusion hardly means that CDM should be abandoned, but it also does not seem to be the best way to begin developing climate change nuisance remedies.

Second, Engel’s proposal lacks a substantive metric for determining the degree of abatement required. Put another way: How many credits do American polluters need to achieve? Engel acknowledges the issue, and admits that there may be no way for courts to do this absent political branch guidance. But then we are back where we started: If we must rely on the political branches for guidance on a climate change cap, then why not have them promulgate climate change regulations completely?\textsuperscript{59}

Third, it neglects the possibility that different states might order different equitable remedies to one source simultaneously.\textsuperscript{60} Under Engel’s framework, this might be less of a problem because she advocates for the purchase of tradeable permits. So theoretically, if New York orders a certain number of permits, and Connecticut orders one-half that amount, complying with the New York order would satisfy the Connecticut order. But this theoretical exercise assumes that all permits are fungible, and they may not be. They may have dissimilar monitoring requirements, different noncompliance penalties, disparate means of approving or calculating offsets, different targets


\textsuperscript{58}. See, e.g., id.

\textsuperscript{59}. Later on, Engel vaguely suggests that “a court might look at the degree of abatement some of the plaintiff states are requiring of their own industries,” referencing New York state standards as an example. Engel, supra note 9, at 1596. But this suggestion seems to exist in some tension with the idea of a cap-and-trade system, since cap-and-trade systems do not mandate specific reductions. Rather, they simply say that all emissions must have permits, and set an overall cap. Engel also suggests that state courts should adopt the Best Available Control Technology standard from the Clean Air Act, but this idea would put the court in the long-term position of monitoring and approving technology, which is hardly the best institutional fit.

\textsuperscript{60}. Engel’s discussion seems to assume, without explicitly arguing, that the public nuisance law of climate change would be state, not federal—a conclusion with which I agree. See Engel, supra note 9, at 1564; infra Part III.
or sources, or diverging approaches to borrowing or banking credits. Some might include safety valves and others not.\footnote{61} 

Fourth, this solution neglects the problem of historic emissions. Although there is good reason not to pursue damages too far back in the past, especially because firms were not and could not be aware of the damage of greenhouse gas emissions, there is also a danger of not looking retrospectively. There is plausible and credible evidence that some of the largest emitters purposefully attempted to mislead the public concerning the science on climate change.\footnote{62} If this evidence turns out to be true, then it would undermine the basic deterrent function of the tort system not to seek damages for it.\footnote{63} 

More than deterrence is at stake here. Although climate change is usually thought of as a future problem, its effects—and thus its damages—are already here. Rising sea levels will inundate tens of thousands of homes, changed temperatures have already started causing droughts, and floods, hurricanes, and other extreme weather events can cause literally billions of dollars in losses, not to mention the destruction of crucial infrastructure.\footnote{64} And even if all nations ratified the Kyoto Protocol tomorrow, greenhouse gases will continue to rise in the atmosphere, and thus at least in the short term, the prospect of damages will increase. Preventing them means adaptation to climate change, and adaptation has costs. Thus, a purely equitable remedy would deprive the victims of climate change compensation for their losses. Basic fairness provides a powerful reason for having tortfeasors pay for the damage.\footnote{65} If we adopt a plan where U.S. emitters needed to buy tradeable permits, this adaptation money would go not to the victims of climate change, but rather to other polluters.

\footnote{61}{A useful discussion of these differences can be found in \textit{MKT. ADVISORY COMM., CAL. AIR RES. BD., RECOMMENDATIONS FOR DESIGNING A GREENHOUSE GAS CAP-AND-TRADE SYSTEM FOR CALIFORNIA} 71–72 (2007), available at \url{http://www.climatechange.ca.gov/documents/2007-06-29_MAC_FINAL_REPORT.PDF}.} \footnote{62} {See infra note 276.} \footnote{63} {The best cutoff date in my mind would be 1992, when the United States signed the United Nations Framework Convention on Climate Change (UNFCCC). Although not an enforceable treaty, the UNFCCC would certainly have put any emitter on reasonable notice that its conduct was damaging the global environment.} \footnote{64} {A good survey can be found in Daniel A. Farber, \textit{Adapting to Climate Change: Who Should Pay}, 23 J. LAND USE & ENVT'L. L. 1, 7–18 (2007). Cass Sunstein estimates that India will lose nearly 5 percent of its GDP from the impact of climate change. See Cass R. Sunstein, \textit{Of Montreal and Kyoto: A Tale of Two Protocols}, 31 HARV. ENVT'L. L. REV. 1, 48 fig.7 (2007).} \footnote{65} {A helpful preliminary discussion of compensation mechanisms, which details the already-incurred harms of climate change, is found in Farber, supra note 9.}
Fifth, using damages-based nuisance regulation could help us answer a currently heated topic (so to speak) in climate change policy: cap-and-trade versus the carbon tax. As suggested earlier, the overall theory underlying the nuisance claim is that it resembles a Pigouvian tax\textsuperscript{66} on greenhouse gas emissions, that is, they attempt to internalize negative externalities of market activities by making the activity more costly for the market participant. Allowing state-based nuisance claims, then, presents us with something of an opportunity. Advocates of a carbon tax—among them the majority of economists—argue that a price-based regulatory system is better for a variety of reasons. Carbon taxes, they say, are less susceptible to governmental corruption than tradeable permits because they are universally applicable and there will be no allocation of them.\textsuperscript{67} Advocates of cap-and-trade retort that this view reflects a naïve view of how tax law and administration actually works,\textsuperscript{68} and in any event, governments could subtly readjust their tax codes to offset carbon taxes for favored industries.\textsuperscript{69} But in fact, we all have little idea because our data base is very slim: carbon taxes are extremely rare,\textsuperscript{70} and despite promising precedents with sulfur dioxide,\textsuperscript{71} no one has ever attempted to implement a cap-and-trade system on anywhere like the scale proposed by its advocates—aside from the ETS, which as noted above, has not been a great success. It thus stands to reason that enacting differing approaches would be helpful; indeed, it might serve as an excellent example of Justice Brandeis' famous

\textsuperscript{66}. A Pigouvian tax—named after the British economist Arthur Pigou (1877–1959), who originated the concept—is one intended to internalize the negative externalities of a market activity by making the activity bear all its costs. In the present case, a Pigouvian tax on a polluter would raise the cost of the polluting activity, leading to its curtailment and thus to a reduction in pollution.


(and admittedly somewhat tired) metaphor of laboratories of democracy.\(^\text{72}\) We need these laboratories when it comes to climate change regulation.

Finally, it seems to have little pretense in mitigating the actual damages done by carbon emissions. We need to be cautious about this; Engel is rightly concerned about administrability and legitimacy in her remedies formulation. Yet it seems to be giving up prematurely not to attempt to develop an actual accounting. Economics might not be nearly as much of a science as its acolytes claim, but a lot of very smart people have been working on this problem for quite awhile. Courts should hear what they have to say and act on the best information possible.

Putting damages in the context of general deterrence presents us with a relatively straightforward analogy: Climate change damages should resemble the sort of carbon tax that most analysts agree would be optimal. Indeed, equating nuisance with general deterrence means that nuisance damages are a carbon tax—just one levied by courts instead of a legislature.

III. THE RIGHT LAW

If plaintiffs and defendants agreed about little else, they seemed to agree that federal common law governs the case, which itself implies that the case belongs in federal court. Indeed, they seemed to be under the impression that litigating public nuisance requires federal common law. There is evidence for this position. Language from *Illinois v. Milwaukee*,\(^\text{73}\) usually referred to as *Milwaukee I*, suggests that whenever states sue for interstate nuisances, the governing authority is federal common law.\(^\text{74}\) At oral argument in *Connecticut v. American Electric Power Co.*,\(^\text{75}\) counsel for the state plaintiffs made this very contention.\(^\text{76}\) But it moves too quickly: A closer examination of precedent and policy provides strong reasons to believe that the public nuisance cases should be based upon state law.

A. The Strange Birth of Federal Common Law

*Milwaukee I* concerned the state of Illinois’ suit against several Wisconsin cities for effluent dumping in Lake Michigan. The then-extent Federal

\(^{72}\) New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

\(^{73}\) *Milwaukee I*, 406 U.S. 91 (1972).

\(^{74}\) See id. at 99–100.


Water Pollution Control Act (FWPCA),\(^7\) required states to control dumping in interstate waters, but its only remedy was an interstate conference and mediation process, which by 1971 had been going on for seven years with no end in sight. Illinois then petitioned the U.S. Supreme Court to take the case under its original jurisdiction.

Originally, the Court rejected the petition because it did not want to take original jurisdiction and—particularly important for our purposes—it saw no federal jurisdictional hook to send the case to federal trial courts.\(^7\) Justice Douglas' original dissent from certiorari denial conceded that "[t]he claim admittedly states no federal cause of action\(^7\) but insisted that the court grant review because "Illinois has nowhere else to go."\(^8\) Justice Blackmun's reaction was similar. His "normal and instinctive reaction" was "negative" because "this will be a big headache for the Court and . . . will prompt the appointment of a special master."\(^9\) But "I am becoming distressed about the pollution of our environment" . . . [and] by the fact that I fail to see a forum in which adequate relief could be obtained.\(^10\)

The Court finally solved the problem through holding that the water pollution complained of was regulated by federal common law, which gave jurisdiction to federal district courts. But its discussion of the issue was hardly a model of clarity. It cites a circuit court opinion\(^11\) for the broad notion that "the ecological rights of a State" require enforcement by federal common law, but its substantive reason as to why that should be true raises more questions than it answers.\(^12\) That appellate case, Texas v. Pankey,\(^13\) was concerned primarily with the question of whether lower federal courts had jurisdiction if

\(^{7}\) Water Pollution Control Act, ch. 757, 62 Stat. 1155 (repealed 1972).
\(^{7}\) Diversity jurisdiction was unavailable to federal district courts in Milwaukee I because states, and the local governments created by them, are not considered citizens for the purposes of diversity analysis. Thus, the Supreme Court's only recourse was to find federal question jurisdiction if it wanted to get rid of the case without turning it over to a state court.


\(^{7}\) Id. at 2.

\(^{8}\) Memorandum From Harry A. Blackmun to the United States Supreme Court Conference 2 (Sept. 16, 1971) [hereinafter Blackmun Memorandum]. Blackmun's fear of judicial headaches turned out to be true. The Milwaukee litigation eventually comprised "more than three years of pretrial discovery, a 6-month trial that entailed hundreds of exhibits and scores of witnesses, and extensive factual findings by the District Court." Milwaukee v. Illinois, 451 U.S. 304, 333 (1981) (Milwaukee II) (Blackmun, J., dissenting). In all, it took nine years to get back to the Supreme Court—which promptly declared the federal common law preempted and turned the whole exercise into "a meaningless charade." \(\text{Id.}\)

\(^{8}\) Blackmun Memorandum, supra note 81, at 2.

\(^{9}\) Texas v. Pankey, 441 F.2d 236, 241 (10th Cir. 1971).


\(^{11}\) Pankey, 441 F.2d 236.
the case raised questions of federal common law, which it answered quite properly in the affirmative. But it did not offer a real theory as to why interstate pollution cases should be based on substantive federal law.

Justice Douglas’ opinion for the Court suggested that the test derived not so much from the ecological rights of a state but rather from “an overriding federal interest in the need for a uniform rule of decision or where the controversy touches basic interests of federalism.” But it was hardly clear why all interstate disputes need a uniform rule; after all, the entire field of conflict of laws exists to resolve just these sorts of disputes. Mass tort litigation involving national corporations and classes of plaintiffs from several states, often involving billions of dollars, are adjudicated without recourse to federal law. Nor does the presence of a state as a plaintiff make a difference; state courts rule against their attorneys general as a matter of course in all sorts of disputes.

Thomas Merrill suggests that it may derive from the possibility that if disputes were determined under state law, then a state as a plaintiff could adjust its own law so as to ensure victory. This suggestion is about as plausible as anything else that has been offered, but it falls short because (1) it assumes that state judges could be ordered about by state legislatures; and (2) such a strategy would probably raise dormant Commerce Clause issues. Moreover, it proves too much because it would also imply that federal common law governs any civil case in which a state is plaintiff.

Merrill wisely circumscribes what we might call the bias theory only to those cases that would have raised the Supreme Court’s original jurisdiction, and that it would have applied federal common law in such an instance so as to maintain impartiality. This seems in accord with precedent, but there may be less here than meets the eye, at least as when applied to climate change.

Most importantly, every one of the original jurisdiction federal common law cases was decided before *Erie Railroad v. Tompkins*, which famously held that “there is no federal general common law.” *Erie* is the 900-pound

86. Id. at 242.
89. Merrill, supra note 9, at 310 (stating that adopting state law “would empower . . . the litigants to manipulate the rule of decision and so defeat the goal of impartial adjudication”).
90. While theoretically, federal common law would preempt such a statute, antipreemption principles would make such an event unlikely. Moreover, as will be discussed shortly, this would seem to require a role for federal common law at odds with *Erie*.
91. See U.S. CONST. art. III, § 2, cl. 2 (“In . . . those [cases] in which a State shall be a Party, the supreme Court shall have original Jurisdiction.”).
92. 304 U.S. 64 (1938).
93. Id. at 77.
gorilla lurking in any discussion of federal common law; yet Milwaukee I’s hazy discussion of it demonstrates the weakness of the federal common law argument. In a footnote, the Court dismisses the *Erie* argument by stating that *Hinderlider v. La Plata River & Cherry Creek Ditch Co.*, 94 decided the same day as *Erie* and written, as *Erie* was, by Justice Brandeis, held that the apportionment of interstate waters is a question of “federal common law.” 95 But even assuming that *Hinderlider* held such a thing, 96 apportionment of interstate waters differs sharply from holding that all interstate pollution must resort to federal common law as a basis for decision.

This distinction makes a difference. The Supreme Court’s grant of original jurisdiction in transboundary public nuisance cases originated with *Missouri v. Illinois*. 97 There, the Court analogized between these suits and disputes between independent sovereign nations. In reasoning that would arise again in *Massachusetts v. EPA*, 98 the Court said that independent states could resolve their conflicts through diplomacy or war, but since the U.S. Constitution forecloses these options, the alternative is an original suit in the Supreme Court. 99

But applying this argument to the climate change cases shows why the analogy does not quite work. *California v. General Motors Corp.*, 100

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94. 304 U.S. 92 (1938).
95.  *Id.* at 110.
96. In *Hinderlider*, the Colorado state engineer cut off the Colorado River from the owner of state-granted water rights, on the grounds that an interstate compact between Colorado and New Mexico subsequently approved by Congress, limited the amount of water that Colorado rights holders could take. *Id.* at 95–98. The Colorado Supreme Court had held that the state engineer’s action had violated the plaintiff’s property rights, but the U.S. Supreme Court reversed the decision. *Id.* at 100–01. It stated that the Colorado Supreme Court ignored previous U.S. Supreme Court adjudications regarding the Colorado River, which undermined the notion that the plaintiff had lost property rights, because state court adjudications could not grant rights that the state itself did not have. *Id.* at 102–03. It also stated that the compact controlled on Constitutional grounds; the U.S. Constitution both gave the state and the U.S. Congress the right to make compacts that controlled state property rights. *Id.* at 103–06. It does indeed make sense to read *Hinderlider* as a federal common law case, for it hardly stands to reason that the U.S. Supreme Court could overrule the Colorado Supreme Court as a matter of Colorado state law.
97. 180 U.S. 208 (1901).
98. 127 S. Ct. 1438, 1454 (2007) (“When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, it cannot negotiate an emissions treaty with China or India, and in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted.” (citation omitted)).
99. See *Missouri*, 180 U.S. at 241 (“If Missouri were an independent and sovereign state all must admit that she could seek a remedy by negotiation, and, that failing, by force. Diplomatic powers and the right to make war having been surrendered to the general government, it was to be expected that upon the latter would be devolved the duty of providing a remedy, and that remedy, we think, is found in the constitutional provisions we are considering.”).
Connecticut v. American Electric Power Co., and all of the public nuisance cases are suits by states against private parties, and thus the diplomatic analogy is inapposite. Little wonder that all but one of the transboundary cases in which the Court granted original jurisdiction were cases between state governments. The exception is the famous Tennessee Copper decision that played an important role in Massachusetts v. EPA. But Tennessee Copper is a pre-Erie case, and the Supreme Court made no effort to determine the basis for its decision for a very good reason—it did not have to. Thus, it can hardly be looked at as precedent for the scope of modern federal common law.

Milwaukee I’s lacunae makes it frail reed for litigants to rest on, and suggests it should be read narrowly—if not to its facts, then simply to the intergovernmental cases. This would reinforce the principle established in Missouri v. Illinois—that states must have a body of law where they can settle disputes with other states—without also subverting Erie’s prohibition on federal general common law.

B. Displacement

But we need not restrict an inquiry into the vitality of a federal common law of public nuisance to Milwaukee I itself, for it remains doubtful whether the broad dicta in Milwaukee I remains good law. In Milwaukee II, the Supreme Court held that federal common law was displaced by the Clean Water Act amendments enacted in 1972, shortly after the Milwaukee I decision. But then what is the standard for displacement of federal common law? Justice Rehnquist’s opinion for the Court hedged the matter, sometimes suggesting that if Congress legislates in the field that federal common law occupied, then displacement occurred, and sometimes suggesting that displacement only occurred in the wake of direct conflict with congressional enactment.

102. The critical cases were: North Dakota v. Minnesota, 263 U.S. 365 (1923); New York v. New Jersey, 256 U.S. 296 (1921); Kansas v. Colorado, 185 U.S. 125 (1902); Missouri v. Illinois, 180 U.S. 208 (1901).
103. Georgia v. Tenn. Copper Co., 206 U.S. 230 (1907). Milwaukee I relied on Tennessee Copper, the one exception, to demonstrate that federal common law applies to more than cases between governments. See Illinois v. Milwaukee (Milwaukee I), 406 U.S. 91, 105 n.6 (1972).
104. This silence was indicative of all the pre-Erie cases. As the Pankey court recognized, “the Supreme Court has not in the past… engaged in making any distinction between federal right claims and justiciable claims of other nature in relation to permitting a State to file an original suit before it.” Texas v. Pankey, 441 F.2d 236, 239 (10th Cir. 1971).
106. In order to keep the language clear, I will use “displacement” of federal common law, in contrast to “preemption” of state law.
107. As Thomas Merrill has cogently explained:
Implicitly adopting the conflict displacement argument, advocates of federal common law in climate change cases argue that *Milwaukee II* is distinguishable because the Clean Air Act differs from the Clean Water Act.\(^{108}\) There are real differences between the statutes. Most importantly, whereas the Clean Water Act requires a federal permit for all point sources,\(^{109}\) the Clean Air Act does not; instead, the latter statute seeks to implement its goals through State Implementation Plans (SIPs) that vary from region to region.\(^{110}\)

But such an argument, in my view, pushes too far. Unlike the old Federal Water Pollution Control Act (FWPCA), which had no provisions for interstate redress, the modern Clean Air Act is chock full of them. It requires SIPs to prohibit emissions that "contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to [the National Ambient Air Quality Standards]."\(^{111}\) It authorizes the EPA to order compliance with a SIP\(^{112}\) as well as citizen suits for SIP violations.\(^{113}\) And in

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On the one hand, the Court repeatedly stressed the comprehensive nature of the Clean Water Act amendments adopted after *Milwaukee I*, and suggested that this new, more comprehensive version of the Act occupied the field of federal regulation of interstate pollution, to the exclusion of the common law. On the other hand, there are passages that stress that the new legislation specifically addressed the problem that the federal common law remedy adopted by the lower courts was designed to rectify—sewage overflows from a point source of water pollution subject to the federal permitting process—implying that the federal common law remedy was displaced because it conflicted with these statutory mechanisms. Merrill, supra note 9, at 312 (internal citations omitted).

\(^{108}\) In *New England Legal Foundation v. Costle*, 666 F.2d 30 (2d Cir. 1981), the Second Circuit did not find federal common law completely displaced by the Clean Air Act because:

\[*The Clean Air Act differs substantially from the Water Pollution Control Act . . . . For example, Justice Rehnquist, writing for the majority in *Milwaukee II* found it especially significant that under the Water Pollution Control Act the EPA regulated every point source of water pollution. Under the Clean Air Act, in contrast, the states and the EPA are not required to control effluents from every source, but only from those sources which are found by the states and the agency to threaten national ambient air quality standards.* Id. at 32 n.2 (citations omitted). Advocates of the continuing power of federal common law point to this statement for support. See Matthew F. Pawa, *Global Warming: The Ultimate Public Nuisance*, in CREATIVE COMMON LAW STRATEGIES FOR PROTECTING THE ENVIRONMENT 107, 152–53 (Clifford Rechtschaffen & Denise Antolini eds., 2007). This statement is a pretty frail reed. The Second Circuit did not need to find the issue of complete displacement for the outcome of the case, and thus quite prudently refused to reach the issue. Furthermore, *Costle* occurred before the Title V Clean Air Act updates, which substantially augmented the Act’s permitting regime. See 42 U.S.C. §§ 7661–7661(f) (2000).\]

\(^{109}\) 33 U.S.C. §§ 1341–1346 (establishing the National Pollutant Discharge Elimination System and other strict requirements for permitting any discharges into water).


\(^{111}\) Id. § 7410(a)(2)(D).

\(^{112}\) Id. § 7413(a)(1).

\(^{113}\) Id. § 7604(a), (f)(3).
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1990, Clean Air Act amendments established the Title V program for permits of major sources regardless of SIPs.\textsuperscript{114}

In short, it possesses precisely what Illinois—and the justices—complained of in the early 1970’s: legal remedies for interstate pollution beyond simple conferences and mediation. Suppose that in 1970, the then-extant FWPCA had required of Wisconsin what the current Clean Air Act requires of all states in the air field. Illinois could have—and probably would have—gone to the EPA and asked it to reject Wisconsin’s SIP for water quality because it was dumping effluents into Lake Michigan. It also would have sued Milwaukee under the Act for violating the provision that said that one state’s action cannot contribute to another state’s failure to attain water quality standards. If this hypothetical holds water (so to speak), then it is very hard to see the additional role played by federal common law. Put another way, even if we accept the conflict displacement argument, \textit{Milwaukee II} still undermines the vitality of federal common law for interstate air quality.

Of course, the modern Clean Air Act structure is not precisely like that of the Clean Water Act, which as noted before requires not a SIP structure but a permit for all discharges. At best, then, the displacement question boils down to a question of presumptions: in debatable cases, do we assume the existence of federal common law or not? \textit{Milwaukee II} answers this question firmly in the negative. There, the Court explicitly referenced Erie and noted that federal common law only exists in “few and restricted”\textsuperscript{115} instances, reaffirming “the assumption that it is for Congress, not federal courts, to articulate the appropriate standards to be applied as a matter of federal law.”\textsuperscript{116} Thus, in the wake of Erie, “separation of powers concerns create a presumption in favor of preemption of federal common law whenever it can be said that Congress has legislated on the subject.”\textsuperscript{117}

\begin{footnotesize}
\begin{enumerate}
\item[114.] Id. §§ 7661–7661f.
\item[116.] Id. at 317. More recent Supreme Court precedent has confirmed this interpretation. See Arthur v. FDIC, 519 U.S. 213 (1997); O'Melveny & Myers v. FDIC, 512 U.S. 79 (1994). So have the circuits. See, e.g., In re Gaston & Snow, 243 F.3d 599, 626 (2d Cir. 2001) (noting that the ability of federal courts to fashion federal common law is “severely limited”).
\item[117.] Senator Line GmbH & Co. KG v. Sunway Line, Inc., 291 F.3d 145, 166 (2d Cir. 2002) (quoting In re Oswego Barge Corp., 664 F.2d 327, 335 (2d Cir. 1985)). If we adopt the Second Circuit’s language literally, it is difficult not to see displacement in the air quality area, because through the Clean Air Act, Congress has certainly legislated “on the subject.” Id. But that is likely too literal: Certainly Congress had legislated on water quality when the Court decided \textit{Milwaukee I}.
\end{enumerate}
\end{footnotesize}
This presumption does not always hold. But the exceptions to it derive from very core areas of federal jurisdiction: Indian law, federal government contracts, and admiralty. In United States v. Texas, for example, the Court held that the federal common law rule allowing prejudgment interest on payments to the federal government survived a federal statute generally regulating on the subject. The decision, written by Justice Rehnquist, the author of Milwaukee II, took a hard line against displacement of federal common law, stating “[i]n order to abrogate a common-law principle, the statute must ‘speak directly’ to the question addressed by the common law,” and specifically holding that this principle applies to federal common law.

Courts looking to uphold federal common law authority in the interstate nuisance area will figure to rest heavily on United States v. Texas. But doing so would cut across the grain of decisions resting on that case, which have virtually all been in the federal contracts area—a deep and robust arena for federal common lawmaking both before and after Erie. The Supreme Court has clarified the United States v. Texas statement to apply only to the extent that an area of common law is so “well established” with respect to a particular application “that we must assume that Congress considered the impact of its enactment on the question now before us.”

It is difficult to believe that interstate air pollution qualifies. There has yet to be a single post-Erie court to find that federal common law regulates interstate air pollution. Only Tennessee Copper found so before Erie. That does not sound so “well established” to me. And even so, as I have argued, even with a conflict displacement model, the modern Clean Air Act does the job.

Somewhat ironically, Massachusetts v. EPA only strengthens the case against federal common law, because it demonstrates that Congress has in fact created a comprehensive scheme for dealing with carbon dioxide. Advocates of federal common law might well contend that the Bush Administration’s refusal to regulate means that there was actually no federal law in place, but this is playing with words; it would imply that any time

119. See, e.g., United States v. Lahey Clinic Hosp., Inc., 399 F.3d 1 (1st Cir. 2005).
120. See Nw. Airlines, Inc. v. Transp. Workers Union of Am., 451 U.S. 77, 96 (1981) (“[i]n admiralty . . . the federal judiciary’s lawmaking power may well be at its strongest.”).
122. Id. at 534.
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the federal government inadequately enforces a regulatory statute, federal common law should take its place. Milwaukee II and its progeny effectively foreclose this argument. There was—and is—a federal law, but it was not enforced. And as the Supreme Court quite properly held, the remedy for this is a lawsuit against the EPA.

Precedent subsequent to Milwaukee II reinforces the presumption against federal common law. Just four weeks after Milwaukee II was decided, a unanimous Court cited Milwaukee I for the proposition that federal common law could only be created “in interstate and international disputes implicating the conflicting rights of States or our relations with foreign nations.” Despite the citation, such an interpretation represents a significant narrowing of Milwaukee I in the way suggested above: federal common law, at least with the United States, is about intergovernmental disputes. And if this is so, then we need not worry about displacement because federal common law would not apply to the climate change cases in the first place.

Among the appellate courts, the Second Circuit has spent the most energy attempting to arrive at a workable standard, which will be at issue in AEP. The Circuit has set up a four-part test for maritime law to determine if the presumption in favor of displacement has been overcome, which applies “somewhat less forcefully” than displacement for federal common law generally: (1) does statutory language or legislative history explicitly displace or preserve judge-made law; (2) “the scope of the legislation”; (3) whether applying judge-made law “would entail ‘filling a gap left by Congress’ silence’ or ‘rewriting rules that Congress has affirmatively and specifically enacted;’ and

125. Tex. Indus., Inc. v. Redcliff Materials, Inc., 451 U.S. 630, 641 (1981). The plaintiffs in AEP relied on Texas Industries to show that Milwaukee I’s broad language was still authoritative. See Oral Argument Transcript at 33, Tex. Indus., Inc., 451 U.S. 630 (No. 79-1144) (statement of Mr. Pawa). But if this was the strongest authority for them, it reveals how weak their case was on this issue.

126. There remains a significant issue regarding dormant foreign affairs preemption in the case of international litigation. See infra Part V.

127. Indeed, recent appellate precedent narrows the scope even further, refusing to create federal common law unless no state common law exists. See United States v. Las Cruces, 289 F.3d 1170 (10th Cir. 2002). In Las Cruces, the federal government sought federal jurisdiction over a quiet title suit concerning water rights in the Rio Grande, and relied on Hinderlider and Milwaukee I as a basis. Id. at 1175, 1185. The Tenth Circuit, however, held that “the reluctance to create common law is a core feature of federal court jurisprudence” and cited Milwaukee II for the proposition that federal common law exists only when “state law cannot be used.” Id. at 1186. Since New Mexico and Texas common law were available, the court reasoned, federal common law was superfluous. Id.

Gone was the concern about biased state common law regimes.

(4) whether the judge-made law at issue represents a ‘long-established and familiar principle’ of the ‘common law.’

These principles seem to point to displacement. Number one is a wash, because the text of the Clean Air Act says nothing about federal common law, either positive or negative. As to number two, the Clean Air Act can hardly have any broader scope than it does. As Merrill has noted, “it is impossible to say that the Clean Air Act is less comprehensive than the Water Act based on pages of legislation or volumes of regulations or economic activity affected or dollars of compliance costs.”

The third prong also seems to be something of a wash because federal common law regulation would neither fill gaps nor run counter to congressional enactment in the absence of a remedy. But four clearly runs in favor of displacement, because, as the experience with Milwaukee I showed, federal common law regulation of air quality can hardly be considered long-established or familiar: even the Justices were unaware of it when the case was first presented to them. At this point, no case states that federal common law regulates interstate air pollution. One can reason from analogy, of course; but this is a far cry from familiar or long-established.

One could argue that the Clean Air Act should be a stronger statute, but it is hard to imagine that such a statute leaves much room for federal common law remedies. Federal courts may conclude the same thing, especially because it will enable them to rid themselves of a contentious and politically sensitive case.

C. State Options

But displacement of federal common law hardly implies the pre-emption of state common law. With state law, as the Milwaukee II court noted, “we start with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.” Alternatively, courts can find preemption if the federal law is “sufficiently comprehensive to make reasonable the inference that Congress left no room for supplementary state regulation” or a state law “actually conflicts with a valid federal statute”

129. Id. at 339.
130. Merrill, supra note 9, at 316–17.
because it "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."^{134}

Although the defendants will argue that the Clean Air Act preempts state common law as well,^{135} they will have a much harder time of it. The Clean Air Act contains a broad savings clause,^{136} and makes it quite clear when it wants to preempt state laws. Section 209(a) explicitly forbids any state from adopting any standard respecting emissions from automotive sources.^{137} Section 233 does the same thing when it discusses aviation.^{138} Moreover, the Supreme Court made it quite clear that even though the Clean Water Act displaces federal common law, at least some state common law remedies remain intact.^{139} So if the Clean Water Act does not fully preempt state common law, then the less precise and comprehensive Clean Air Act should certainly not do so.

D. The Ouellette Problem

Even if we conclude that the Clean Air Act does not preempt all state nuisance law, we would still need to know which state nuisance law would apply to the controversy. Wouldn’t this be a matter of state conflicts laws? The Supreme Court has suggested no. In International Paper v. Ouellette,^{140} the Court held that the Clean Water Act does not preempt all state nuisance remedies, but the Act’s comprehensive scheme for point source regulation means that only the source state’s nuisance law is available as a common law remedy.^{141}
Some writers have suggested that this principle would apply under climate change nuisance law as well. But there are excellent reasons to doubt such a conclusion. Ouellette’s holding rested upon the Clean Water Act, not the Clean Air Act, and that means a great deal regarding preemption. In contrast to the Clean Water Act National Pollution Discharge Elimination System (NPDES) Program, which forbids all discharges into waters without a permit, as noted above, the Clean Air Act relies upon a more general system of State Implementation Plans (SIPs), which means that in many air basins, certain discharges might not require a permit at all.

The Ouellette court restricted the choice of law because of the substantive nature of the Clean Water Act’s regulatory scheme. It noted that “[b]y establishing a permit system for effluent discharges, Congress implicitly has recognized that the goal of the Clean Water Act—elimination of water pollution—cannot be achieved immediately, and that it cannot be realized without incurring costs.” Thus, the Court worried that allowing affected states to use their own common law in bringing nuisance suits against polluters would “disrupt this balance of interests”. In keeping with the balancing framework, under the Clean Water Act, the assumption is that the EPA will administer the permit program unless it approves a state program.

In the Clean Air Act, on the other hand, the EPA is forbidden from balancing costs and benefits when setting the National Ambient Air Quality Standards. The focus is on attaining air quality standards. In contrast to the Clean Water Act, it is presumed that states will administer the permit system as part of their SIPs. And indeed, given the state-focused and nonbalancing nature of the Clean Air Act, it is not outside the realm of possibility that part of a state’s SIP might include a nuisance suit against a neighboring state.

Moreover, Ouellette rested upon a much different factual scenario—a traditional private nuisance claim between two private parties—than is presented in the climate change cases. The Court reasoned that allowing the affected state’s nuisance law to control would subject defendants to a series of different nuisance suits from different parties in different states, creating an

142. See Merrill, supra note 9, at 316; Pawa, supra note 108, 136–41.
143. Ouellette, 479 U.S. at 494.
144. Id. at 495.
146. I do not mean to hinge the distinction on the formal difference between private and public nuisance. The claim in Ouellette was officially construed as a public nuisance claim. See Ouellette v. Int’l Paper, 602 F. Supp. 264, 274 (D. Vt. 1985). Rather, the point is a substantive one based upon the actual facts and implications of the litigation itself.
Whatever the substantive policy merits of this conclusion, it hardly applies to the climate change cases, which will inevitably comprise multiple bodies of law. Consider American Electric Power itself: It operates utilities in eleven states ranging from Louisiana to Ohio. It makes little sense in this context to attempt to find a single “source state.”

Advancing a damages solution helps mitigate the problem that the Ouellette court feared: competing orders telling a state to take contradictory or incompatible actions. This is unsurprising, as several different state damages regimes would essentially resemble several different state tax regimes, which have long been a commonplace of federalism. The Reagan Justice Department suggested this approach in Ouellette, but the Court rejected it because of what it saw as the clear “exclusive grant of authority” to the source state. But where such a grant does not exist, it serves as a wise approach to the issue, and one that the Court has already endorsed in other circumstances.

Why does all of this matter? After all, given the vagueness inherent in all nuisance claims, there is little reason to think that one state’s nuisance rules will differ so profoundly from others that the choice-of-law question should affect the substantive outcome. But judicial incentives will differ significantly without overcoming the Ouellette issue. It is one thing for a court, even a state supreme court, to create a new and innovative cause of action, even one that is well grounded in doctrine. But it is quite another for a court to do so on the basis of another state’s law. Courts would be (rightfully) quite cautious—perhaps overly so—if they were called on not to create new common law, but rather predict what another state’s high

147. 479 U.S. at 495–97.
149. The difficulty with identifying a source state hardly suggests that state law should simply remain out of the question. Large firms deal with differing state regulations all the time. Manufacturers of consumer products, for example, need to grapple with fifty different products liability regimes. Indeed, this is the entire premise of “our federalism.” Graves v. New York ex rel. O’Keefe, 306 U.S. 466, 490 (1939) (Frankfurter, J., concurring). In the same way that the political question doctrine does not exist to allow federal courts an excuse to avoid hard cases, complexity does not allow them to avoid adjudication. It does, however, require them to pay close attention to the administrability of remedies.
150. Ouellette, 479 U.S. at 498 n.19.
court would do given the same situation. It thus would make successful claims very difficult, if not impossible.

Plaintiffs would obviously have the option of going to source state’s courts to get relief. And as I have argued earlier, there is no reason per se to think that state courts cannot handle these claims. But in the case of climate change, the incentives do become quite difficult if one considers the source state. A central difficulty in climate change regulation lies in the fact of concentrated costs and diffuse benefits. If the source state’s law controlled, such a conundrum would be enshrined as a matter of law. This is not the best way to pursue effective regulation.\textsuperscript{152}

E. Preemption and the General Motors Corp. Case

Perhaps the only place where the defendants will get traction on preemption is with motor vehicles, where state law regulation is expressly prohibited. But of course there is the great exception: California. And of course the General Motors Corp. case was brought by the California attorney general, with a supplemental California state public nuisance claim. This second claim was no accident.

Simply because California has authority under the Clean Air Act, however, does not mean that it can do whatever it wants. It must instead apply for a waiver from the EPA in order to regulate. No doubt the defendants will argue this preemption applies to state nuisance law. Section 209(a) of the Act bars any state from “adopt[ing] or attempt[ing] to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part.”\textsuperscript{153}

152. The skeptic could counter that there is an opposite problem: that of the receiving state’s courts imposing excess costs on the source state. California courts might have little worry about imposing costs on coal-fired plants in Utah, for example. This imposition is indeed an issue, but less so for two reasons. First, the dormant Commerce Clause could be used in situations where source states have genuine reason to believe that costs are being imposed too strongly, since the touchstone in such cases is discriminatory treatment. See, e.g., S.C. State Highway Dep’t v. Barnwell Bros., Inc., 303 U.S. 177, 189 (1938) (“[A state] may not, under the guise of regulation, discriminate against interstate commerce . . . . [S]o long as the state action does not discriminate, the burden is one which the Constitution permits . . . .”). While a full analysis of the dormant Commerce Clause implications of state climate change regulation is beyond the scope of this Article, the Clause clearly prohibits discriminatory treatment; indeed, that is its best (and potentially only) justification. See, e.g., John E. Nowak & Ronald D. Rotunna, Constitutional Law 308–46 (6th ed. 2000); Robert A. Sedler, The Negative Commerce Clause as a Restriction on State Regulation and Taxation: An Analysis in Terms of Constitutional Structure, 31 Wayne L. Rev. 885, 968–99 (1985). Second, as I will try to make clear below, such a situation would serve as a healthy incentive to generate national climate change legislation. Denying recovery would have no similar incentive in Congress.

inspection, or any other approval relating to the control of emissions from any new motor vehicle or new motor vehicle engine as condition precedent” to the sale or registration of vehicle or vehicle engines.\footnote{154}

But will they win? The question turns on whether state common law nuisance qualifies as a standard. The Act defines “standard” as a form of “requirement.”\footnote{155} Similarly, it defines “standard of performance” as “a requirement of continuous emission reduction.”\footnote{156} And it could be argued that a requirement is a statement about remedy, not about the behavior of regulated parties. Were a state court to order automakers to reduce the emissions of their vehicles by a certain date, this would constitute a requirement. If, however, a court were to hold that the automakers must pay for the damages their vehicles cause, this would not constitute a requirement for them to do anything about the vehicles themselves. That would be their choice, depending upon their internal bottom lines.

The Supreme Court, however, has already explicitly considered this argument and has rejected it. In \textit{Cipollone v. Liggett Group}, the Court held that the Public Health Cigarette Smoking Act of 1969\footnote{158} preempted several state common-law tort claims, even though that law only preempted state “requirements” and “prohibitions.” The Court noted that “the phrase ‘no requirement or prohibition sweeps broadly and suggests no distinction between positive enactments and common law; to the contrary, those words easily encompass obligations that take the form of common-law rules.’”\footnote{159} It approvingly cited previous precedent that concluded, “State regulation can be as effectively exerted through an award of damages as through some form of preventive relief. The obligation to pay compensation can be, and in fact is designed to be, a potent method of governing conduct and controlling policy.”\footnote{160} Indeed, three justices dissented from \textit{Cipollone} on this basis.\footnote{161}

\footnote{154. \textit{Id.}} \footnote{155. \textit{Id.} § 7602(k) (defining “emissions standard” as “a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis”).} \footnote{156. \textit{Id.} § 7602(l).} \footnote{157. 505 U.S. 504 (1992) (plurality opinion). Although the cited section of \textit{Cipollone} is a plurality opinion, Justices Scalia and Thomas dissented on the grounds that the plurality’s preemption analysis did not go far enough. Thus, a clear majority of justices endorsed the refusal to distinguish between positive law and common law. \textit{Id.} at 544 (Scalia, J. dissenting, joined by Thomas, J.).} \footnote{158. Pub. L. No. 91-222, 84 Stat. 87 (1970), amended by, 15 U.S.C. §§ 1331–1340 (2000).} \footnote{159. \textit{San Diego Bldg. Trades Council v. Garmon}, 359 U.S. 236, 247 (1959).} \footnote{160. See \textit{Cipollone}, 505 U.S. at 531 (Blackmun, J., dissenting, joined by Kennedy and Souter, JJ.).} \footnote{161. \textit{Bates v. Dow AgroSciences LLC}, 544 U.S. 431 (2005), is not to the contrary, despite some dicta that could be read otherwise. The \textit{Bates} court carefully refused to say that any reference to “requirements”}
This decision might put us back where we started. If the federal government refuses to act, then it will also refuse to grant a waiver, so then what is the point? The straightforward answer is that there is a difference between hostility and paralysis. Suppose a Democratic administration or a reality-based Republican administration favored climate change regulation, but was unable to secure passage of any bill through Congress. It could regulate through its own authority under the Clean Air Act as well as granting the waiver that the Bush Administration denied. The irony in all of this would be that, at least for automobiles, California state nuisance law would begin to look like a sort of quasi-federal common law, with states’ nuisance laws either following California or staying out of the area entirely.

There is also a less straightforward answer: States acting as plaintiffs can avoid the 209(a) pre-emption problem by filing suits against other defendants. Such a strategy makes sense not only on legal, but also on policy grounds, and I take it up in Part IV.

F. The Benefits of State Regulation

In the meantime, we should see that there are a number of good reasons for hearing climate change cases under state law. Most straightforwardly, state judges are (for the most part) electorally accountable and federal

never preempts state common law claims. The test, it stated, was the elements of the common-law duty in light of the federal statute’s preemption prohibition. Given the narrowness of the preemption at issue in Bates, the Court’s conclusion (written by the same justice) does no violence to Cipollone. Indeed, § 209(a) of the Clean Air Act is far broader than both.

162. This hypothetical contrasts with the current Bush Administration. See Ron Suskind, Without a Doubt, N.Y. TIMES MAG., Oct. 17, 2004, at 50–51, available at http://www.cs.umass.edu/~immerman/play/opinion05/WithoutADoubt.html. Suskind wrote:

In the summer of 2002, after I had written an article in Esquire that the White House didn’t like about Bush’s former communications director, Karen Hughes, I had a meeting with a senior adviser to Bush. He expressed the White House’s displeasure, and then he told me something that at the time I didn’t fully comprehend—but which I now believe gets to the very heart of the Bush presidency.

The aide said that guys like me were “in what we call the reality-based community,” which he defined as people who “believe that solutions emerge from your judicious study of discernible reality.” I nodded and murmured something about enlightenment principles and empiricism. He cut me off. “That’s not the way the world really works anymore,” he continued. “We’re an empire now, and when we act, we create our own reality. And while you’re studying that reality—judiciously, as you will—we’ll act again, creating other new realities, which you can study too, and that’s how things will sort out. We’re history’s actors . . . and you, all of you, will be left to just study what we do.”

Id.

163. See Steven P. Croley, The Majoritarian Difficulty: Elective Judicatures and the Rule of Law, 62 U. CHI. L. REV. 689, 725–26 (1995) (noting that thirty-eight out of fifty states have elected supreme courts, and even in those states without elected supreme courts, lower court judges are chosen
judges are not, and this provides powerful support to state adjudication of claims. Climate change is politically fraught: Resolution of the issue involves literally tens of billions of dollars in damages, potentially far-reaching changes in environmental and energy policy, and enormous implications for the texture of human life itself. In this context, to have unelected judges determine policy direction seems somewhat perverse.

To be sure, state judicial elections are hardly the model of democratic accountability. Few people—even well-informed voters—have any idea of for whom they are voting when they punch their cards for judicial officers, and many—including yours truly—for that very reason often leave the circle blank. But any resolution of climate change claims will quickly ascend to the state supreme court, whose members are better known than their trial court colleagues. And they will certainly become known if they rule on climate change issues.

This all may sound downright bizarre: If the goal is electoral accountability, why not leave the judiciary out of the equation entirely? The answer might be in the form of a question: Why not hear cases in a judicial forum where the remedy is the internalization of pollution costs? State determination of these claims might yield a good combination of political accountability
electorally). Croley may even understated the matter somewhat. In New Jersey, for example, supreme court justices do not have life tenure but are instead appointed for terms—a provision that may have led the New Jersey Supreme Court to abandon its far-reaching Mount Laurel decisions. See DAVID L. KIRK, JOHN P. DWYER & LARRY A. ROSENTHAL, OUR TOWN: RACE, HOUSING, AND THE SOUL OF SUBURBIA 93–111 (1995) (suggesting that Chief Justice Robert Wilentz may have upheld the legislative override of Mount Laurel due to fears that he would not be reappointed).

164. One legal wrinkle here might well deserve a comprehensive treatment of its own: Whether in a public nuisance case with damages as a remedy, the trial would be in front of a judge or a jury, and which decisionmaker would bear the damages phase. See U.S. CONST. amend. VII. The short answer is that the law is unsettled in both state and federal court. Tull v. United States, 481 U.S. 412 (1987), cuts both ways for federal court. On the one hand, Justice Brennan's opinion for the Court suggested that public nuisance claims did not need to be heard in front of a jury because the relief sought was equitable. Id. at 420–21. On the other hand, Part III held that Congressional-mandated civil penalties were not so fundamental to the right to jury trial that the judge could determine these penalties. Id. at 427. Thus, in federal court, one might conclude that the jury would determine liability, and the judge would determine damages. A footnote cannot summarize fifty state laws. If California is typical, then we simply have no answer because injunctive relief is the traditional remedy and thus no jury trial is required. See, e.g., DiPrro v. Bondo Corp., 62 Cal. Rptr. 3d 722 (Cal. Ct. App. 2007). The California Supreme Court has held that the state's right to a jury trial, CAL. CONST. of 1849 art. I., § 3, derives from what was regarded as a common law right at the state's founding in 1850. But public nuisance causes of action for damages were unknown at the time. That hardly exhausts the matter, for “the right to a jury trial does not entirely depend upon the existence of a particular right of action in 1850... Rather, it exists when a current case is of the same ‘class’ or ‘nature’ as one which existed in 1850.” Jefferson v. County of Kern, 120 Cal. Rptr. 2d 1 (Cal. Ct. App. 2002) (citation omitted). When we are this deep in the weeds, it is best to wait for the state supreme court's resolution—or another article.
without interest-group interference. But we can favor state adjudication for a more muted reason: State court mistakes are more easily corrected through the political process, and may in fact enhance that very process.

Rick Hills has cogently argued for a strong presumption against reading federal statutes as preemption state law.\textsuperscript{165} Congress, he argues, has various institutional disabilities against resolving pressing national problems. Most significantly, its sheer size creates “Madison’s Nightmare” of interest-group gridlock.\textsuperscript{166} Echoing the earlier highly influential theory of Elliott, Ackerman & Millian,\textsuperscript{167} Hills suggests that rejecting preemption will force those groups who generally favor gridlock—usually national business lobbying organizations—to push Congress to move in response to state regulation. Because those opposing these business groups, such as consumer and environmental organizations, already seek congressional action, the upshot will be greater congressional consideration of pressing national policy issues and a larger chance of legislative action.

Hills’ logic applies well to state common law. All common law, like state statutes, could push Congress to preempt. And state common law could do so with particular force. Hills argues that interest groups that usually fight congressional action have an independent interest in national uniformity not only because of the administrative costs of fifty different state laws but also because of states’ incentives to impose large regulatory costs on nonresident businesses.\textsuperscript{168} One need not adopt this proposition as a general matter; but it is not stretching to say that at least some state regulation might discriminate against out-of-state interests, creating political pressure for congressional action.

More importantly, the use of state common law allows for state legislative overrides of judicial decisions, further providing a democratic check. State legislatures are more likely than Congress to override common law decisions. As Hills notes, the size and scope of interests represented in Congress make it particularly difficult to enact legislation. Its procedural rules also make legislative overrides difficult, since the vast majority of states’ legislative bodies contain nothing like the filibuster.\textsuperscript{169}


\textsuperscript{166.} See id. at 10–13.


\textsuperscript{168.} Hills, supra note 165, at 29.

\textsuperscript{169.} A 1992 study by the National Conference of State Legislatures (NCSL) found that only thirteen out of fifty states had a filibuster-like mechanism, and only one—Texas—is a large state. See NAT’L CONFERENCE OF STATE LEGISLATURES, INSIDE THE LEGISLATIVE PROCESS 49 (1991). More recently, the NCSL conducted a survey that found twelve states not limiting debate, with Texas missing. See Karl Kurtz, Filibusters Rare in State Legislatures, THE THICKET OF STATE LEGISLATURES, Feb. 15, 2007, http://ncsl.typepad.com/the_thicket/2007/02/filibusters_rar.html.
Even if Congress' hand is not forced, it makes good sense to leave climate change litigation in the hands of the states. Most obviously, getting climate change regulation right is hard: Leaving a diverse group of damages remedies will also allow observers to see which remedies work more or less effectively. This is true both substantively and administratively. Substantively, as I have suggested above, a consensus appears to be emerging on the proper rate of a carbon tax, although consensus hardly equals truth. To the extent that it is possible to see different damages measures affecting defendants differently, or having different defendants react differently, then we can get a better sense of the relative general deterrence of each damages measure. Administratively, different courts will have different structures for determining and monitoring damages, which will help create the process of learning by doing.

IV. THE PROPER DEFENDANT

All of this begs the question, however, as to which defendants ought to be sued in the first place. If, as this Article has suggested, public nuisance litigation serves as a form of climate change regulation, then we need also ask a central question that is posed to all proposals: Are we regulating the appropriate entities? In the climate change context, this question asks whether regulation should be upstream—at the point of carbon production—or downstream—at the point of consumer use. Obviously, several points present themselves as possibilities. Connecticut v. American Electric Power Co. and California v. General Motors Corp. take a somewhat midstream approach, suing entities that do not actually remove the carbon but are also not consumers. Policy considerations, however, counsel against such a posture. The most sophisticated proposals for levying a carbon tax suggest that it be placed upstream. As the Congressional Budget Office has explained:

[A] downstream system could impose significant implementation challenges. The number of entities that would need to be regulated would grow, and identifying their emissions would initially be difficult. In fact, inaccurate data about the baseline emissions of downstream industries (such as cement, iron, and steel plants) in the European Union’s trading program for CO₂ emissions caused regulators to issue more to those industries than

170. This question concerns the degree to which any climate change regulation should occur upstream (for example, at the point of the carbon being taken from its initial source) or downstream (for example, closer to the consumer). I discuss this issue in greater detail, with my own tentative recommendation in Part IV.
they intended to under the first phase of the program. That overallocation contributed to large price swings at the end of the first year of reporting.\textsuperscript{173}

The CBO also noted similar problems with downstream regulation of acid rain.\textsuperscript{174} Moreover, an upstream tax could be administratively easier because:

\textit{[T]he tax could build upon an existing infrastructure. For example, coal producers already pay an excise tax (which is used to fund the Black Lung Trust Fund) as do producers and importers of petroleum (to fund the Oil Spill Trust Fund). A CO₂ tax based on the sales of coal or petroleum would be an additional excise tax and could, presumably, be implemented at a relatively modest incremental cost.}\textsuperscript{175}

Little wonder, then, that most carbon tax advocates favor upstream application of taxes.\textsuperscript{176} Such a lawsuit might entail a formidable number of entities, but far fewer defendants,\textsuperscript{177} and in any event, it would be no more than many nationwide class actions.

If these policy and administrative advantages are not enough, legal issues also tilt strongly in favor of upstream litigation. Although, as mentioned above, state common law climate change regulation would be preempted by the Clean Air Act in regard to automakers, it would not be in regard to coal and other fossil fuel producers. Section 211(c)(4)(A) forbids any state from prescribing or attempting to enforce, for the purposes of motor vehicle emission control, “any control or prohibition respecting any characteristic or component of a fuel or fuel additive in a motor vehicle or motor vehicle engine.”\textsuperscript{178}

\begin{footnotes}
\item[174.] Id. at 16.
\item[175.] Id.
\item[176.] See, e.g., Memorandum From Charles Komanoff & Daniel Rosenblum, Carbon Tax Center, to a Legislative Aide for a Member of the House Ways & Means Committee (Mar. 22, 2007), available at http://www.carbontax.org/issues/implementing-carbon-taxes.
\item[177.] An upstream carbon tax system would “entail regulating roughly 150 oil refineries, 1,460 coal mines, and 530 natural gas processing plants.” Cong. Budget Office, supra note 173, at 15.
\item[178.] Clean Air Act, § 211(c)(4)(A), 42 U.S.C. § 7545(c)(4)(A) (2000).
\end{footnotes}
Such a provision contrasts quite sharply with section 209(a), which forbids any state “standard”: here, the Act prohibits only any state “control or prohibition,” and that, only such controls and prohibitions for the purpose of motor vehicle emissions control. Precedent does not tell us whether the phrase “control or prohibition” would preempt state nuisance law. But the balance of considerations indicates that it does not.

As a leading commentator has observed, section 211(c)(4) “embraces a model of minimal displacement.” As noted before, the Clean Air Act makes it quite clear when it wants to forestall all state action, and 211(c)(4) is not such an instance. To be sure, the power to tax is still the power to destroy, and thus it could be argued that nuisance law mimicking a carbon tax would rise to the level of a prohibition. But this contention moves far too quickly. The language of control or prohibition is the language of specific, not general, deterrence. The whole point of general deterrence is that it is not a prohibition. And if we read control to mean any state tort claim that might force a defendant to pay damages (and thus potentially change its behavior), this would be tantamount to reading 211(c)(4) as a preemption provision as broad as 209(a), which it plainly is not. Little wonder, then, that 211(c)(4) lawsuits have focused on bans to fuel additives (most prominently, MTBE), not on taxation or tort claims.

In sum, then, while the attorneys general are correct in bringing climate change suits based on public nuisance, they are not only using the wrong body of law, and most are seeking the wrong kind of relief, but they are also suing the wrong parties.

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180.  The phrase, of course, derives from Chief Justice Marshall. See McCulloch v. Maryland, 17 U.S. (4 Wheat.) 316, 431 (1819) (“An unlimited power to tax involves, necessarily, the power to destroy . . . .”). A tax that effectively became a prohibition would be another story for preemption purposes. It might also raise other legal issues. Cf. Panhandle Oil Co. v. Mississippi ex rel. Knox, 277 U.S. 218, 223 (1928) (Holmes, J., dissenting) (“The power to tax is not the power to destroy while this Court sits.”).
181.  See, e.g., In re Methyl Tertiary Butyl Ether (MTBE) Prods. Liab. Litig., 341 F. Supp. 2d 386 (S.D.N.Y. 2004); Am. Petroleum Inst. v. Jorling, 710 F. Supp. 421 (N.D.N.Y. 1989). In MTBE, the Southern District held that Section 211(c)(4) did not preempt state regulations, but this was primarily because such regulations were not for the purpose of emissions regulation, thus distinguishing it from climate change litigation. See MTBE, 341 F. Supp. 2d at 406–07.
The principles outlined above call for a series of public nuisance lawsuits by state attorneys general against fossil fuel producers—whether of coal, petroleum, or natural gas. Such litigation would have benefits over many of the current suits on the basis of judicial competence, administrability, feasibility, and legitimacy.

A. How Should Courts Assess Damages?

Recall the analogy—in fact, an identity—drawn earlier between a damages remedy and a carbon tax. What should the damages/tax rate be? There seems to be little consensus as to the appropriate level. But as William Pizer has observed, “among many of the domestic programs established or proposed so far ... all are in the $15 to $25 per ton range.”\(^1\) Similarly, in 1998 the Clinton Administration calculated that if nations complied with Kyoto, the trading price would be about $23 a ton.\(^2\) British Columbia has proposed a tax beginning immediately with $10 a ton and rising to $30 a ton by 2012.\(^3\) Consensus may be more in reach than previously assumed.

The experience of New Jersey’s courts in implementing the Mount Laurel II decision\(^4\) is enlightening. Mount Laurel’s critics dismiss it as an ineffective “throwback,”\(^5\) but the evidence suggests a strong ability to build consensus based on highly complex social scientific evidence. Mount Laurel II demanded that every township in the state provide its fair share of affordable housing, an even more amorphous concept than general deterrence or cost internalization. But the trial court found a way. As Charles Haar describes it:

After a brief attempt at hearing testimony in a conventional adversarial process persuaded him that the planning community could debate for years over equally reasonable alternatives, [the judge] placed the parties’ planning experts together in a conference room with the request that

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182. William A. Pizer, Practical Global Climate Policy, in ARCHITECTURES FOR AGREEMENT, supra note 7, at 280, 295.
183. See Richard N. Cooper, Alternatives to Kyoto: The Case for a Carbon Tax, in ARCHITECTURES FOR AGREEMENT, supra note 7, at 105, 114.
they work out a formula to which all could subscribe. All lawyers were excluded. If not quite as extreme as the cloistering of the medieval jury, whose members were denied food until they reached a verdict, the technique still worked in this modern drama. Somehow, after breaking up into subcommittees, with back-and-forth private consultations, the twenty-one experts, representing a cross-section of the profession (and including professional planners not involved in the litigation), after several days succeeded in hammering out a consensus formula for prescribing regional fair share.187

One might even argue that assessing a carbon tax is a less demanding process than regional fair shares. The consensus formula was just that: a relatively complicated equation whose principles were also vague in application, because they rested on, for instance, the number of acres within each municipality that were suitable for housing.188 Arriving at a carbon tax, on the other hand, means developing a number. Once that number is derived, it applies to all emissions regardless of the specific circumstances of an emitter.189 In any event, finding the tax rate is no more complicated than the successful Mount Laurel experience.

The initial damages/tax calculation would be the prorated per capita population share by state. If we say that the U.S. carbon tax should be $25 a ton, then we would take a source’s emissions, multiply them by the population percentage of a state, and arrive at the damages product. California’s population of a little more than thirty-nine million is about 12.2 percent of the total U.S. count. So we could either discount the tax or the emissions to 12.2 percent—it is the same either way. At some level, the tax will be speculative; but any system will be speculative, and this result is no different from any major civil litigation190 or any Pigouvian tax system.

188. Id. at 59.
189. To be sure, there is the challenge of determining what a firm’s actual emissions are. But this issue exists in all climate change regimes, whether tax-based or cap-and-trade.
190. See, e.g., Steinhauser v. Hertz Corp., 421 F.2d 1169, 1174 (2d Cir. 1970) (allowing the defense to argue that the plaintiff, who became schizophrenic after a minor accident, would have become schizophrenic in a short time anyway and, thus, that damages should be reduced accordingly: “However taxing such a problem may be for men who have devoted their lives to psychiatry, it is one for which a jury is ideally suited.”).
B. Is This Legitimate?

Comparing the difficulty of assessing damages with taxes raises the question of whether courts should even be in this business to begin with. Oceans of ink have spilled over the alleged “countermajoritarian difficulty” in adjudication. Yet because public nuisance litigation derives from the common law, the legislature can overturn it whenever it wishes, and if, as advocated here, the key decisionmakers are state judges, they are accountable to the electorate. Justice Frankfurter pungently observed more than sixty years ago that

[if the function of this Court is to be essentially no different from that of a legislature, if the considerations governing constitutional construction are to be substantially those that underlie legislation, then indeed judges should not have life tenure and they should be made directly responsible to the electorate.]

But if judges do not have life tenure and are made directly responsible to the electorate, then perhaps courts should make decisions of a more legislative nature.

One could press the legitimacy question further and argue that even with democratic accountability, pursuing a public nuisance remedy simply is not what judges do. Hart and Sacks famously contrasted the legislative and executive “power of continuing discretion” with the judicial mode of “reasoned elaboration.” Yet it is far from clear that relying upon a consensus view of economists—or even a strongly supported economic view without consensus support—strays from reasoned elaboration. Implementing the principles of general deterrence and cost internalization based upon advice from the best representatives and policy research and social science hardly comprises a recipe for arbitrariness. There may be many things wrong with

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191. Skeptical readers might wonder why this question was not addressed initially in the Article, as it seems to be a threshold objection. But we cannot answer whether courts are appropriate unless we have a relatively clear idea of what we are asking them to do. Thus, this discussion has been delayed until now.


194. I must use “perhaps” if for no other reason than the inverse of a proposition is not necessarily true. All human beings are mortal, but it hardly follows that all nonhuman beings are immortal.

being a policy wonk, but it is hardly “a series of ad hoc judgments . . . unrelated to each other or at least not related by a systematic effort of reason.”

Using nuisance litigation to construct a carbon tax possesses a critical advantage over other plans: its ability to be implemented. Many thoughtful observers seem to assume that political obstacles make it close to impossible. Still, it is easier to get a legal judgment than to get a bill enacted in the legislature.

C. The Causation/Damages Link

All the intellectual work behind carbon tax rates might be fine, the skeptic may counter, but it ignores the most basic principle behind tort litigation: The defendant must cause the plaintiff’s damages. In the traditional case of public nuisance, if the plaintiff can demonstrate that activity constitutes a nuisance, then it makes sense that abatement is a remedy. But if the plaintiff asks for damages, then it must show those damages, which in the climate change case poses something of a problem. The district judge in Comer set forth what he saw as the most basic problems:

[T]here exists a sharp difference of opinion in the scientific community concerning the causes of global warming, and I foresee daunting evidentiary problems for anyone who undertakes to prove, by a preponderance of the evidence, the degree to which global warming is caused by the emission of greenhouse gasses; the degree to which the actions of any individual oil company, any individual chemical company, or the collective action of these corporations contribute, through the emission of greenhouse gasses, to global warming; and the extent to which the emission of greenhouse gasses by these defendants, through the phenomenon of global warming, intensified or otherwise affected the weather system that produced Hurricane Katrina.

The mind boggles at the court’s ignorance of the scientific consensus on climate, which is profoundly robust. As the former administrator of the U.S. National Oceanic and Atmospheric Administration put it, “there’s no better

196. Id. at 145 (describing the power of continuing discretion).
197. The editors of SCIENTIFIC AMERICAN have observed blandly that “[t]axes on carbon emissions are effective, but politics discourages their adoption in the U.S. More likely is a federal cap-and-trade market in which polluters get emissions permits and choose how to meet their reduction targets.” Key Concepts, in Making Carbon Markets Work, Sci. Am., Dec. 2007, at 70. It should be noted that although this is a comment on an article by David Victor and Danny Cullenward, these two authors do not share this political assumption and in fact argue for the United States to move to a carbon tax.
scientific consensus on this on any issue I know—except maybe Newton's second law of dynamics. The only doubts come from the mainstream media, which gives attention to the miniscule minority of climate skeptics as if it were a respected part of the scientific community.

Still, a distinct causation issue does arise with a damages remedy. As others have shown, it is not the basic fact of climate change that is at issue. A sturdy and venerable lines of cases, as well as traditional substantial factor causation, holds that a public nuisance does not have to solely cause a problem: it need only contribute to it. Contrary to the Comer court’s assertion, dividing the damages between tortfeasors should pose little problem, and has firm anchoring in contemporary tort doctrine. The DES cases established the feasibility of market share liability, and the same principles could be applied to carbon emissions. Courts have shown reluctance to extend the DES cases, but this has mostly been on the grounds that the other products challenged under other lawsuits, such as lead paint, asbestos, and childhood vaccines, lack the essential fungibility that characterized DES. To paraphrase Gertrude Stein, however: carbon is carbon is carbon is carbon. It makes no difference in terms of its impact whether it is emitted from a high-tech automobile in California or a coal-fired plant in Hyderabad, India. Courts are already extending market share principles in public nuisance litigation even when there is no precise fungibility.

Rather, the bigger legal issue for damages lies in the precise connection of carbon emissions with specific environmental damage. Put another way,
The issue is not whether carbon emissions cause some damage—they clearly do. Rather, the issue is whether we can connect climate change with specific events. A carbon tax seeks to internalize the costs of carbon emissions, and the tax rate attempts to assess this damage.

California’s briefs seek to overcome this problem by arguing that their damages are quite concrete: the loss of the Sierra snow pack, for example. There is something to this legal strategy, but it disrupts the use of damages as a regulatory instrument, because climate change will cause, or contribute to, a host of potentially devastating events that cannot be connected retrospectively. And the problem appears to deepen because a large number of climate change damages will not occur for decades, and we will not know precisely what they will be. This lack of knowledge has led some to conclude that damages remedies are impossible. After all, when a future disaster occurs, how will we know that global warming caused it? Better to simply abate the nuisance, or rely on a structural injunction, and be done with it.

But we should not sell the common law so short. It has become a cliché (probably because it is true) that the genius of the common law is that it can adapt to changing circumstances. It has within it the resources to solve this problem—and in fact has already begun to do so.

Let us begin with the harder problem, namely, the prospective damages caused by climate change. Traditionally, tort law is seen to be retrospective, and indeed, it initially appears problematic to have a court award relief for a harm that may or may not occur in the future. But this perspective sees things too narrowly, for courts have created a cause of action for the enhanced risk of future harm. These remedies are at times controversial—but not because the court is awarding damages for enhanced risk. Rather, the debate stems from the degree of certainty of future harm required for courts to award

210. See, e.g., Engel, supra note 9, at 1587–88.
211. See, e.g., SCHUCK, supra note 54, at 15 (“Damages are assessed only retrospectively; they are an ex post remedy that comes into play only after harm has occurred (although it is intended to deter future harm as well).”). Since Schuck’s book concerns specifically governmental wrongdoing, it is unclear how broadly he intended this description of damages to be. That said, that even such a careful scholar could make such a sweeping assertion shows how ingrained is the assumption of the retrospectivity of damages.
damages. Some courts require a preponderance of the evidence; others (including famously conservative ones) do not.

The analogy to these cases is not a stretch: Enhanced risk of future harm is precisely what present greenhouse gas emissions entail. The question of evidentiary preponderance arises in the climate change context, but not significantly. The IPCC believes it “likely” or “very likely” that anthropogenic increases in greenhouse gases are causing climate change, and that climate change will have significant effects. But current legal doctrine accounts even for those possibilities that are less than likely. The econometric models that derive carbon tax rates do so by discounting for probabilities. In other words, the rate takes into account the possibility of, say, the collapse of the Greenland ice sheet, but does so by heavily discounting for the fact that such an event is highly unlikely. This is precisely what courts have required.

If courts allow recovery for enhanced risk of future harm, then recovery for the risk of past harm is even easier. Here, the best analogy lies in the loss-of-a-chance cases, which represent a means of discounting damages calculations in light of less-than-50 percent causation and have received

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214. Illinois courts tend to be somewhat conservative, especially on tort causation issues. See, e.g., Smith v. Eli Lilly & Co., 560 N.E.2d 324, 337 (Ill. 1990) (rejecting market share liability as “too great a deviation from our existing tort principles”).

215. Of the courts that have considered the issue, only Pennsylvania has rejected enhanced-risk damages outright, holding that the plaintiff has the right to sue again once a disease has actually manifested itself. See Simmons v. Pacor, Inc., 674 A.2d 232 (Pa. 1996).

216. See Petriello, 576 A.2d at 484 (“The probability percentage for the occurrence of a particular harm, the risk of which has been created by the tortfeasor, can be applied to the damages that would be justified if that harm should be realized.”); Dillon, 771 N.E.2d at 370 (“A plaintiff can obtain compensation for a future injury that is not reasonably certain to occur, but the compensation would reflect the low probability of its occurrence.”).

Courts have sometimes been less sympathetic to enhanced risk damages in toxic tort cases for a simple reason: The plaintiff can pursue an additional action if the subsequent harm actually materializes. See 2 DAN B. DOBBS, LAW OF REMEDIES § 8.1(7), at 410 (1993). But such a solution is patently inadequate in the climate change cases. The cases that refused enhanced risk damages involved a single episode of tortious behavior. Greenhouse gas emissions, however, represent a continuing activity. Thus, damages are not here simply compensatory; they reflect an attempt to deter the behavior of producers. To wait until climate change damage occurs and only then award damages can only recall Mr. Bumble’s response to coverture: “[I]f the law supposes that, then the law is an ass.” CHARLES DICKENS, THE ADVENTURES OF OLIVER TWIST 399 (Oxford Univ. Press 1953) (1838).

217. See, e.g., Doll v. Brown, 75 F.3d 1200, 1206 (7th Cir. 1996) (Posner, C.J.) (“This basis for an award of damages is not accepted in all jurisdictions, but it is gaining ground and it is in our view basically sound.”); Delaney v. Cade, 873 P.2d 175, 186–87 (Kan. 1994); Falcon v. Memorial Hosp., 462 N.W.2d 44 (Mich. 1990); DeHanes v. Rothman, 727 A.2d 8 (N.J. 1999) (sub silentio acceptance of principle); Alberts v. Schultz, 975 P.2d 1279 (N.M. 1999); McKellips v. Saint Francis
substantial scholarly support.\footnote{The seminal article is Joseph H. King, Jr., Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences, 90 YALE L.J. 1353 (1981); see also Elmer J. Schaefer, Uncertainty and the Law of Damages, 19 WM. & MARY L. REV. 719 (1978).} Most courts “appear to be adopting the approach.”\footnote{M ARK A. FRANKLIN, ROBERT L. RABIN & MICHAEL D. GREEN, TORT LAW AND ALTERNATIVES 367 (8th ed. 2006). So far, the loss-of-a-chance formula has been restricted to medical malpractice cases. See Hardy v. Sw. Bell Tel. Co., 910 P.2d 1024 (Okla. 1996); RESTATEMENT OF THE LAW (THIRD) TORTS: LIABILITY FOR PHYSICAL HARM § 26 cmt. n (Proposed Final Draft No. 1, 2005). But there is no principled reason to do so; in the climate change cases, refusal to do so, and thus refusal to obtain compensation for harms, undercuts both the deterrence and compensation goals of the tort system.} For retrospective damages, then, damages should be discounted twice: once for the market share of carbon emissions, and second for the probability that the damage was caused by climate change.\footnote{Such a double-discounting approach has received academic support elsewhere. See, e.g., Allen Rostron, Beyond Market Share Liability: A Theory of Proportional Share Liability for Nonfungible Products, 52 UCLA L. REV. 151, 215 (2004) (arguing that courts should recognize that “fungibility is not essential if liability can be allocated in a way that reasonably accounts for the differing levels of risk created by each defendant”); Glen O. Robinson, Multiple Causation in Tort Law: Reflections on the DES Cases, 68 VA. L. REV. 713, 750 (1982) (“As long as liability is proportionate to the risks created by a defendant, there is no reason why the Sindell liability rule cannot be applied to cases involving multiple and different risk-creating activities.”).}

In sum, then, what seems to be a difficult nexus between causation and damages becomes far less so when we conceptualize the problem as an action to recover for enhanced risk of damages, and discount appropriately. The law should ask for no more.

D. Integrating State Cap-and-Trade Systems With Public Nuisance

California’s own climate change legislation sets an emissions cap, and implies a cap-and-trade system; Governor Arnold Schwarzenegger’s Market Advisory Committee has recommended it.\footnote{See MKT. ADVISORY COMM., supra note 61, at 5.} Many other states seem poised to follow suit. This could pose a problem to the nuisance system, but does not necessarily do so.

Suppose that the plaintiff state is California, and that it determines that its own law applies in a nuisance case. If the defendants in the nuisance case are the same type of emitters regulated by California’s climate change regulations, then they could face different and more stringent regulations than in-state producers. For example, if California sues out-of-state power producers, then those producers would face the carbon tax, but in-state producers would not. And if emissions permits were distributed for free, as seems likely, then this...
could result in a competitive advantage for in-state producers. Basic fairness—not to mention the dormant Commerce Clause—strongly counsels against such discriminatory treatment.

But several options exist for those states adopting cap-and-trade systems. Most obviously, these states can bring nuisance suits at one level (for example, against fossil fuel producers) and distribute emissions permits at another (for example, for power producers), creating a sort of cap-and-tax system already envisioned by some economists. Alternatively, out-of-state producers could implead the in-state producers in order to expand the coverage of the system. Finally, for those states with a cap-and-trade system, the damages settlement could simply require external producers to purchase the equivalent amount of emissions allowances required of internal producers. Thus, the court might ordinarily set the damages mark at $25 a ton; but if emissions permits for a particular year cost only $15 a ton, then the damages payments could be reduced to that number. The broader point is that the integration of nuisance suits and state-based cap-and-trade systems can be feasibly handled.

VI. INTERNATIONAL IMPLICATIONS

But wait—there is more. Climate change litigation could also play a role in assisting the prevention of international leakage, by allowing lawsuits

222. See, e.g., NORDHAUS, supra note 67.

223. The feasibility of such an option might vary depending upon the impleader rules in each state. California law, for example, allows cross-complaints by a defendant against nonparties if it “arises out of the same transaction, occurrence, or series of transactions or occurrences as the cause brought against him.” CAL. CIV. PRO. CODE § 428.10(h) (2004). California case law requires that this provision be interpreted liberally. See, e.g., Thorpe v. Story, 73 P.2d 1194 (Cal. 1937); Nomellini Constr. Co. v. Harris, 77 Cal. Rptr. 361 (Cal. Ct. App. 1969). So the series of occurrences provision could quite easily be applied to carbon emissions resulting in climate change. In New York, the issue is less settled, see N.Y. C.P.L.R. 1007 cmr. 1007:3 (McKinney 1997), but the Appellate Division appears to have adopted a standard more akin to the California one. See Gross v. DeMeglio, 533 N.Y.S. 2d 386, 388 (N.Y. App. Div. 1988) (holding that an impleader is allowed even though an impleaded party is not liable for all or part of the plaintiff’s claim against the defendant, because an impleaded claim is “highly relevant to and interrelated with the economical resolution of the primary action”).

224. Such a framework would resemble the standard proposed by Thomas Merrill, videlicet a golden rule of transboundary pollution whereby the law does not require any more of foreign pollutants than it would require of domestic sources. See Thomas W. Merrill, Golden Rules for Transboundary Pollution, 46 DUKE L.J. 931 (1997).

against foreign sources of carbon emissions. If nuisance claims can apply to domestic emissions, and if those emissions represent an international problem, then why could not international sources be brought under the nuisance umbrella? Limitations of space and time (not to mention the reader’s patience), prevents a complete discussion of the issue in this Article, but several preliminary observations are relevant.

Consider the example of the Tata Group, India’s largest conglomerate, whose subsidiary, Tata Motors, recently announced that it will produce the lowest-cost automobile in the world, with a base sticker price of roughly $2,500.226 All well and good, except that the potential impact of the car “has given environmentalists nightmares, with visions of the tiny cars clogging India’s already-choked roads and collectively spewing millions of tons of carbon dioxide into the air.”227

Is a public nuisance lawsuit against Tata possible? I conclude that it is, and that in certain circumstances, such lawsuits could be used against emitters in other countries. It is hardly an ideal solution, and cannot be applied against all foreign emitters of CO₂. It may, however, be better than nothing.

A. The Return of Federal Common Law

“Our federalism” presents something of an irony in the context of international public nuisance litigation. Although claims against American defendants will rely on state common law, claims against international emitters will most likely derive from federal common law.

Whatever happened to Clean Air Act displacement? The answer lies in the nature of the Clean Air Act itself: It makes no pretense toward the regulation of foreign sources.228 And in light of the strong presumption against extraterritorial application of domestic law,229 it would be hard indeed to find implied extraterritoriality.

Earlier, I argued that federal common law does not apply in suits against private parties. But that was only in the domestic context, and the reason is straightforward. Federal common law is sharply disfavored domestically

228. The only provisions concerning “International Air Pollution” in the Act concern whether domestic pollutant sources are affecting another country—not vice versa. See 42 U.S.C. § 7415 (2000).
because state law exists as a default position. Internationally, however, state law has no such status. Indeed, state law bearing substantially upon international questions may be preempted by the Constitution itself.230 The Supreme Court, in another obscure opinion from Justice Douglas,231 Zschernig v. Miller, created a dormant foreign affairs power in which state laws that “ha[ve] a direct impact of foreign relations and may well adversely affect the power of the central government to deal with those problems”232 are void.

For more than three decades, the dormant foreign affairs power lay, well, dormant, but the Supreme Court awakened with a vengeance in American Insurance Ass’n v. Garamendi.233 Garamendi struck down a California statute requiring German insurers to disclose information about Holocaust-era insurance policies. The Court concluded that the state law was void because it conflicted with federal policy. But this holding was not your typical preemption case. No federal statute blocked the California law. Nor did any treaty, or even any executive agreement. Instead, when push came to shove, the Court found itself relying on letters by the Deputy Secretary of the Treasury and the German government. Essentially, the Garamendi Court struck down the California statute because California disagreed with Presidential foreign policy, and thus deprived the chief executive of a bargaining chip in international negotiations.

In the climate change context, Garamendi and Zschernig pose little threat to state common law actions against domestic emitters; they involve domestic defendants whose emissions originate solely within the territory of the United States.234 To be sure, these could be the subject of an international agreement, but just about any domestic policy could be. Garamendi and Zschernig do, however, foreclose state common law actions against Tata. These actions are designed to alter the behavior of international actors and suggest that the policy of a foreign country is inadequate to mitigate climate change. This is precisely the sort of state law disapproved of in Zschernig, and is the reason why the strong presumption in favor of state law from Milwaukee II235 is inapplicable. Back to Milwaukee I236 we go.

230. A complete discussion of the contours of dormant foreign affairs power and climate change litigation is outside the scope of this Article. The foregoing section, however, relies heavily on Merrill, supra note 9, at 319–28, with whose analysis I agree.
234. See Merrill, supra note 9, at 319–28, reaching a similar conclusion.
B. Jurisdiction

Why should state attorneys general be able to haul an Indian manufacturer of automobiles for use in India into an American court? We still lack an authoritative statement from the Supreme Court, or even a sufficiently comprehensive appellate opinion, about the application of the *International Shoe Co.* minimum contacts doctrine in international litigation. This is particularly true of tort claims. The Supreme Court’s most recent pronouncement on the issue, *Asahi Metal Industry Co. v. Superior Court*, is not helpful; all it did essentially was to restate the minimum contacts doctrine in an international context. The Court did caution that “[g]reat care and reserve should be exercised when extending our notions of personal jurisdiction into the international field,” but it “failed to articulate what specific concerns are involved or what weight to accord foreign interests.”

Could a state gain specific jurisdiction over Tata? In *Calder v. Jones*, the Court endorsed at least a version of an effects jurisdictional test, holding that when defendant commits an intentional act expressly aimed at the forum that causes harm, the “brunt” or focus of which the defendant knows is likely to be suffered in the forum. So plaintiffs would argue that Tata falls into this category because intentionally made cars that it knew would emit greenhouse gases. This manufacturing, they will contend, was “expressly aimed” at the United States because it knew that the United States would be one of the victims of climate change.

But I doubt whether such a claim will succeed. The “intent” in *Calder* appeared to be the intent to harm, not the intent to act. And if we take seriously the notion of “expressly aiming,” then this seems to imply purposeful, not knowing action. Moreover, it is hard to argue that the United States suffers the “brunt” of an action if Tata’s actions cause damage worldwide. This skepticism means restricting *Calder*’s scope, but that appears to be precisely what appellate courts have done with the case. The circuits have essentially used *Calder* as one of many factors that tilt in favor of

239. *Id.* at 115 (quoting *United States v. First Nat’l City Bank*, 379 U.S. 378, 404 (1965) (Harlan, J., dissenting)).
242. *Id.* at 789–90.
jurisdiction, enhancing the contacts that give rise to the cause of action.\textsuperscript{243} At least under current interpretations, it is incorrect to state that \textit{Calder} creates an effects test\textsuperscript{244} and such a difference has been repeatedly reaffirmed by circuit courts, with a few beginning to find instances where general jurisdiction by itself can form an adequate basis for a lawsuit moving ahead.\textsuperscript{245}

Instead, plaintiffs would be well advised to argue for general jurisdiction against Tata. The Supreme Court has acknowledged the difference between specific and general jurisdiction,\textsuperscript{246} and such a difference has been repeatedly reaffirmed by circuit courts, but to date, not a single case has upheld general jurisdiction as the basis of a lawsuit.

Tata Sons Ltd., the parent company of Tata Motors, has extensive contacts in the United States through its subsidiaries. The head of its American corporate operations has identified more than eighty Tata offices in the United States, with nearly 10,000 people working in them.\textsuperscript{247} It runs the Pierre Hotel in New York and recently purchased the Tyco Global Network.\textsuperscript{248} Tata Motors itself is listed on the New York Stock Exchange (NYSE),\textsuperscript{249} which demonstrates its desire to raise capital in the American market.

And Tata wants more American contacts. Decades ago, there may have been an advantage to listing in New York because the markets there were more liquid and efficient than in, say, London. This advantage is no longer true. But one important advantage of listing on the NYSE would be to use this stock for takeovers of American companies, since U.S. shareholders will be more amenable to taking payments in American list securities.\textsuperscript{250}

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\textsuperscript{243} See, e.g., Air Prods. and Controls, Inc. v. Safetech Int’l Inc., 503 F.3d 544, 552–53 (6th Cir. 2007) (adopting the enhancement interpretation of \textit{Calder}).
\textsuperscript{244} See, e.g., Far West Capital, Inc. v. Towne, 46 F.3d 1071, 1079 (10th Cir. 1995) (“Our review of these post-\textit{Calder} decisions indicates that the mere allegation that an out-of-state defendant has tortiously interfered with contractual rights or has committed other business torts that have allegedly injured a forum resident does not necessarily establish that the defendant possesses the constitutionally required minimum contacts.”); Reynolds v. Int’l Amateur Athletic Fed’n, 23 F.3d 1110, 1120 (6th Cir. 1994).
\textsuperscript{247} David Good, Good Tidings, http://www.tata.com/0_tata_worldwide/america/articles/20051007_tidings.htm (last visited Apr. 16, 2008).
\textsuperscript{248} Id.
\end{flushright}
This assertion is not conspiracy talk. There is nothing inherently wrong with Tata moving swiftly and aggressively into the American market. But it also implies that the company has decided to maintain continuous and substantial contacts with that market. Listen again to the conglomerate's American CEO. His position in the United States represents "the first time that a major Indian company has opened an office in Washington. There are a lot of companies that have sales offices in the U.S., but I believe not one has had this kind of operation." His goal is to support Tata businesses in the U.S. I will be focusing primarily on the companies that already have a presence in the U.S.: TCS, Indian Hotels, Tetley, Tata Tea, Tata Automotive Components and Tata Steel. I want to make sure that they are aware of changes in the political and regulatory atmosphere in the U.S. that may affect them as they plan their U.S. business strategies. I will also do whatever I can to promote business for them in the U.S. market.

Independent authors confirm that Tata’s social responsibility rhetoric has real substance. The point, however, is that Tata’s involvement in the United States has real substance as well. Compare it with the description of the defendant’s contacts provided in Helicopteros Nacionales de Colombia, S.A. v. Hall:

[Defendant] never has been authorized to do business in Texas and never has had an agent for the service of process within the State. It never has performed helicopter operations in Texas or sold any product that reached Texas, never solicited business in Texas, never signed any contract in Texas, never had any employee based there, and never recruited an employee in Texas. In addition, [defendant] never has owned real or personal property in Texas and never has maintained an office or establishment there. [It] has maintained no records in Texas and has no shareholders in that State.

None of these assertions are true for Tata, except of course for the references to Texas in particular. The specific references to Texas do raise the scenario of a plaintiff asking a court to aggregate the defendant’s American contacts in order to find the requisite minimum. Given Tata’s extensive American contacts, it may well comport with due process to find minimum contacts in one jurisdiction, but it certainly would be easier to aggregate.

253. Id. at 411.
There is at least some modest precedent for such an aggregation approach, and it has not been foreclosed by either Congress or the Supreme Court. Aggregation hardly seems contrary to "traditional notions of substantial justice and fair play" to examine a defendant's contacts with the United States as a whole when the claim is made in federal court on the basis of federal law. And it makes particular sense in federal common law claims, which are rare and can hardly be expected to be the subject of congressional action. If Congress feels otherwise, it can always displace.

C. Forum Non Conveniens

Tata will also defend the suit based upon forum non conveniens, which resembles jurisdictional issues but derives from a different premises and relate to different issues. The Supreme Court has established a balancing test for forum non conveniens claims, but several prongs of this test will defeat Tata's motion.

A defendant invoking forum non conveniens "ordinarily bears a heavy burden in opposing the plaintiff's chosen forum." Federal law ordinarily maintains "a strong presumption in favor of the plaintiff's choice of forum, which may be overcome only when the private and public interest factors clearly point towards trial in the alternative forum." In Piper Aircraft Co. v. Reyno, the Supreme Court approved the substantial weakening of the presumption because the plaintiffs in that case were foreign, raising suspicion about unprincipled forum shopping. But in the climate cases, each state would seek to litigate in a federal court at home.

255. See Foster-Miller, Inc. v. Babcock & Wilcox Can., 46 F.3d 138, 150 (1st Cir. 1995) ("The doctrines of personal jurisdiction and forum non conveniens share certain similarities, but they embody distinct concepts and should not casually be conflated.").
258. Piper Aircraft, 454 U.S. at 265–66. Private interest factors comprise the "relative ease of access to sources of proof; availability of compulsory process for attendance of unwilling, and the cost of obtaining attendance of willing, witnesses; possibility of view of premises, if view would be appropriate to the action; and all other practical problems that make trial of a case easy, expeditious, and inexpensive." Id. at 241 n.6 (quoting Gulf Oil Corp. v. Gilbert, 330 U.S. 501, 508 (1947)). Public interest factors include "the administrative difficulties flowing from court congestion; the local interest in having localized controversies decided at home; the interest in having the trial of a diversity case in a forum that is at home with the law that must govern the action; the avoidance of unnecessary problems in conflicts of law, or in the application of foreign law; and the unfairness of burdening citizens in an unrelated forum with jury duty." Id. (internal quotation marks and citations omitted).
259. 454 U.S. 235.
And on top of this and the ongoing presumption in favor of plaintiff’s choice of forum, the public interest factors militate strongly in favor of keeping the litigation in the United States. In terms of administrative difficulties stemming from court congestion, as of 2006 Indian courts had an overwhelming backlog of twenty-seven million cases, with almost $75 billion—roughly 10 percent of India’s GDP—tied up in legal disputes. Any state’s interest in the litigation is of course, overwhelming. Transferring the case to India would not solve any conflicts problems because the choice-of-law issue will arise in any event. And there is no problem with burdening a jury in an unrelated forum. And there is no issue of convenience for Tata, which is a multinational conglomerate with (as noted above) an already substantial presence in the United States.

The Court noted in *Piper Aircraft Co.* that “if the remedy provided by the alternative forum is so clearly inadequate or unsatisfactory that it is no remedy at all, the unfavorable change in law may be given substantial weight.” India’s judicial system is clearly inadequate and unsatisfactory for its own citizens as well as foreigners. Experienced analysts ask not whether the legal system is adequate, but given its overwhelming corruption and incompetence, it can be saved at all. The Supreme Court has pioneered important public interest cases, but below the level of the Supreme Court, there lies “the appalling weakness of the Indian civil justice system”; “with the partial exception of the Supreme Court, most of the institutions of the judiciary remain in a permanent state of crisis.” Even if the Supreme Court rules in favor of the plaintiffs, there is little reason for optimism being enforced by other agencies

261. Id.
262. The private interest factors seem something of a wash because there will be sources and witnesses on both sides, and there is no need for a view of the premises.
263. 454 U.S. at 254.
264. See, e.g., Fali S. Nariman, India’s Legal System: Can it Be Saved? (2006). Nariman is no disgruntled critic: He is currently the President of the Bar Association of India.
266. Id. at 160.
of government or lower courts. Forum non conveniens in this case would not be a promoter of judicial efficiency but rather its destroyer.

D. How Far Can This Go?

Given Tata’s extensive contacts in the United States, enforcement of judgments does not appear to pose a problem. Of course, not every producer of Indian emissions has the sorts of continuous and sustained contacts as does Tata. But many of them, as well as emitters in China, export products to the American market. The Tyndall Centre estimates that net exports from China accounted for 23 percent of its total CO₂ emissions, and since this number derives from 2004 statistics, the percentage could well be higher. In these situations, the proper defendant would be the entity that manufactured the product for export (or the exporter itself), whose engagement with the American market would likely suffice even under the “stream-of-commerce-plus” doctrine suggested by the Supreme Court plurality in Asahi Metal.

If we recall the analogy of the nuisance cases to a carbon tax, we can see that at least some of the emissions can be captured through the judicial equivalent of a border tax adjustment (BTA) or equivalent levies on other subsidiaries of a parent company. The best scholarly work suggests that such a BTA would comply with relevant World Trade Organization rules, particularly

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267. Charles Epp succinctly summarizes the difficulty that the Supreme Court in India had in enforcing its public law vision when he observes, “[t]he Indian Supreme Court clearly tried to spark a rights revolution—but little happened.” CHARLES R. EPP, THE RIGHTS REVOLUTION: LAWYERS, ACTIVISTS, AND SUPREME COURTS IN COMPARATIVE PERSPECTIVE 71 (1998).

268. Tata would no doubt argue that Indian and not federal common law should apply. Choice-of-law and jurisdictional analysis are different. See Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 821 (1985). There seems little reason, however, to suppose that a federal court would not apply federal common law, especially when the state’s interest in domestic law being applied is so great.


270. See Asahi Metal Indust. Co. v. Superior Court, 480 U.S. 102, 108–13 (1984) (plurality opinion) (arguing that “something more” than placing something in the “stream of commerce” is required for personal jurisdiction under the Due Process Clause). The plurality worried that jurisdiction based upon the mere placement of a product in the stream of commerce would violate the Due Process Clause, and instead emphasized that “a finding of minimum contacts must come about by an action of the defendant purposefully directed toward the forum State.” Id. at 112. If a plaintiff state attorney general were to bring a public nuisance action against an entity that manufactured the product for the American market or exported it there, then this would clearly meet the standard. Additional ambiguity arises because many products have a highly complex, international assembly chain. See ROBYN MEREDITH, THE ELEPHANT AND THE DRAGON: THE RISE OF INDIA AND CHINA AND WHAT IT MEANS FOR ALL OF US 97–116 (2007) (describing these supply chains). The plurality opinion may simply result in the defendant being the last entity in the supply chain, with costs being passed through the chain, perhaps through indemnification agreements.
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if domestic sources are also subject to public nuisance suits. Given China's refusal to limit its carbon emissions, this is perhaps the most promising way of bringing Beijing into some sort of international policy framework.

But we should be cognizant of what the international nuisance cannot do. China currently is building one new coal-fired power plant every week, mostly to meet domestic electricity demand. To the extent that these plants do not connect with foreign trade, the public nuisance strategy will most likely not be available. And perhaps the most useful device for gaining jurisdiction and damages—American corporate involvement in Chinese energy production—could actually produce perverse incentives. American or European firms get involved in the Chinese energy sector when China wants access to cleaner technology, for example, shifting from conventional pulverized coal plants to more expensive gasification and carbon sequestration projects. Using the higher technology as a jurisdictional hook could subvert the very technology transfer upon which any successful international climate change regime depends. This recognition, however, should redouble our efforts to press domestic coal producers to fund and to develop the kind of sequestration technology that can forestall the environmental disaster of growing developing-country coal dependence. And for that, we need the domestic nuisance litigation to succeed.

CONCLUSION

Climate change regulation is not a dinner party, especially in the United States. As James Q. Wilson has noted:

Policy making in Europe is like a prizefight: Two contenders, having earned the right to enter the ring, square off against each other for a prescribed number of rounds; when one fighter knocks the other one


out, he is declared the winner and the fight is over. Policy making in the United States is more like a barroom brawl: Anybody can join in, the combatants fight all comers and sometimes change sides, no referee is in charge, and the fight lasts not for a fixed number of rounds but indefinitely or until everybody drops from exhaustion. . . “it’s never over.”

It thus seems somewhat unrealistic to criticize the nuisance system on the grounds that it is unwieldy, imperfect, and continually contentious. Yes, it is, and so is everything else. Litigation very often fails, and so does legislation. Even those who are optimistic about the prospects for national climate change legislation make no predictions about its coherence or effectiveness.

We are entitled to some cynicism on this point. Those interests that have loudly protested that climate change should only be addressed by the national legislature and executive are precisely the same ones that have fought any action by the national legislature and executive. If they truly believe this, then they have the opportunity now to press Congress for vigorous action. The rest of us, meanwhile, should not hold our breath.

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275. See, e.g., J.R. DeShazo & Jody Freeman, Timing and Form of Federal Regulation: The Case of Climate Change, 155 U. PA. L. REV. 1499 (2007) (arguing that the next few years will see comprehensive climate change legislation, but that the only prediction that can now be made is that the cap-and-trade system will be an important part of it).

276. ExxonMobil, for example, has led a long-running campaign designed to mislead the public about the threats of climate change. Its strategy was laid out six years ago in a confidential oil industry memo titled A Global Climate Science Communications Action Plan: “Victory will be achieved when uncertainties in climate science become part of the conventional wisdom.” See Environmental Defense, Too Slick: Stop Exxon Mobile’s Global Warming Misinformation Campaign, http://action.environmentaldefense.org/EDF_Action_Network/alert-description.html?alert_id=2444798 (last visited Mar. 24, 2008); see also Terence Chea, Jerry Brown Makes Climate Change Crusade, SFGATE, Dec. 15, 2007, http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2007/12/13/state/n122910S76.DTL (quoting the Vice President of the Pacific Legal Foundation as saying that climate change lawsuits are better handled by Washington lawmakers).