

THE EFFICIENCY OF ENERGY EFFICIENCY: IMPROVING PREEMPTION OF LOCAL ENERGY CONSERVATION PROGRAMS

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I. INTRODUCTION	784
II. ENERGY EFFICIENCY AS A RESOURCE, AND THE REBOUND EFFECT AND ENERGY PARADOX CONCERNS.....	786
A. The Rebound Effect.....	787
B. The Energy Paradox.....	788
C. The Energy Paradox as Applied to Efficiency in Cars and Buildings	789
III. MORE PRAGMATIC AND DEFERENTIAL PREEMPTION: FOCUSING ON NEGATIVE EXTERNALITIES	791
A. The Merits of Uniform Standards for Preemption.....	793
1. The Drawbacks of Uniform Standards as Compared to Federal Floors	794
2. Public Choice Critique of Uniform Standards.....	795
B. State and Local Regulations Prompt Updates to Federal Policy	795
C. Focusing on Negative Externalities for Energy Efficiency Preemption.....	798
1. Negative Externalities.....	798
2. Putting the Preemption Question to the Courts	800
IV. AUTOMOBILE FUEL ECONOMY AND GREEN TAXICABS.....	801
A. Engine Manufacturers and the New Standard for “Standards”	803
B. Metro Taxicab II: A Slippery Slope.....	804
1. The City’s Rule.....	804
2. The Federal Court Decisions Enjoining the City’s Rule	805
3. Federal Laws Offer a Counterpoint to the Metro Taxicab II Decision	807
4. The Consequences of Metro Taxicab II.....	808
C. ATO v. Dallas: Less Preemption but No More Clarity.....	809

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V. GREEN BUILDINGS AND APPLIANCE STANDARDS 811

 A. The Albuquerque Building Code and Partial Injunction 814

 B. The Washington Building Code and Denial of Injunction 817

VI. A BETTER APPROACH TO PREEMPTION FOR ENERGY EFFICIENCY CASES .. 818

 A. Limiting CAA and EPCA Preemption for More Fuel-Efficient
 Taxicabs 818

 1. The Textual Step: Defining “Standards” More Narrowly 819

 2. The Institutional Step: Whether the Agency Has Addressed
 Preemption in This Context 819

 3. The Policy Step: Whether the Scheme Will Lead to Externalized
 Costs 820

 B. Limiting EPCA Preemption for Green Building Codes..... 822

 1. Circumvention 822

 2. Inquiring into Cost-Externalization Can Address the
 Circumvention Concern Under EPCA..... 823

VII. CONCLUSION: TOWARDS A COMMON APPROACH 824

I.
INTRODUCTION

The United States consumes an enormous amount of energy via our buildings and cars. Buildings and light vehicles in the U.S. use forty-six quadrillion British Thermal Units (BTUs) in an average year,¹ which represents over 10% of the total energy consumed worldwide. As global energy demands rise, climate change advances, and new technologies enter the marketplace, many states and localities have tried to push their economies in a greener direction. Often, these measures are centered on increasing energy efficiency for buildings (via new building codes) and cars (by regulating taxicabs). But state and local governments face a series of barriers to this effort, erected by federal courts announcing broad preemption decisions under the Clean Air Act (CAA) and Energy Policy and Conservation Act (EPCA). This article identifies and argues against these high barriers to increasing energy efficiency.

Buildings consume 40% of our nation’s energy, the largest share of any sector of the economy, and produce an equally large percentage of our carbon emissions.² Light vehicles make a substantial contribution as well, consuming

1. See U.S. DEP’T OF ENERGY, BUILDINGS ENERGY DATA BOOK 1-1 tbl.1.1.1 (2010), *available at* <http://buildingsdatabook.eere.energy.gov/TableView.aspx?table=1.1.1>; U.S. DEP’T OF ENERGY, TRANSPORTATION ENERGY DATA BOOK tbl.2.5 (2011), *available at* <http://cta.ornl.gov/data/chapter2.shtml>.

2. BUILDINGS ENERGY DATA BOOK, *supra* note 1. See also Press Release, U.S. Dep’t of Energy, Obama Administration Launches New Energy Efficiency Efforts (June 29, 2009),

about 16% of our energy³ and producing about 7% of U.S. greenhouse gas emissions.⁴ Increasing energy efficiency has been described as an extremely cost-effective way to cut emissions: “[E]nergy efficiency isn’t just low hanging fruit; it’s fruit lying on the ground,” said Stephen Chu, while he was Secretary of Energy.⁵ Thus, to make a meaningful impact, any government programs to conserve energy and limit emissions will necessarily require more efficient buildings (in large part via more efficient appliances) and cars. The CAA, EPCA, and subsequent amendments make clear that the federal government will set the standards in these areas, preempting “relate[d]” state requirements⁶ and those “concerning” the same subject area.⁷ However, the case law on preemption of state and local energy efficiency programs in the areas of building codes and taxicabs has become more extensive in recent years, and has often prevented economically efficient local policies from taking effect.

The text of the relevant provisions in the CAA and EPCA is straightforward and simple. But that simplicity masks any indication of congressional intent, and leaves courts uncertain of the scope of the preemption. In *Metropolitan Taxicab Board of Trade v. City of New York (Metro Taxicab II)* and *Association of Taxicab Operators v. Dallas (ATO)*, the courts came to opposite conclusions on whether local incentive schemes for hybrid taxicabs were preempted by federal standards.⁸ The courts in *Building Industry Association of Washington v. Washington State Building Code Council (BIAW)* and *Air Conditioning, Heating, and Refrigeration Institute v. City of Albuquerque (ACHRI)* similarly came down on different sides regarding green building codes.⁹

The preferable policy approach is not always clear, either: a scheme that preempts both stronger and weaker state standards (known as floor-and-ceiling preemption) creates economic benefits like protecting economies of scale in manufacturing and avoiding discrimination among states. But it also eliminates the potential for local tailoring and experimentation, and blocks local policymakers from prodding the federal government to maintain optimal standards.

http://www.whitehouse.gov/the_press_office/Obama-Administration-Launches-New-Energy-Efficiency-Efforts [hereinafter DOE Press Release].

3. TRANSPORTATION ENERGY DATA BOOK tbl.2.5, *supra* note 1.

4. See *Sources of Greenhouse Gas Emissions: Overview*, U.S. ENVIRONMENTAL PROTECTION AGENCY (Apr. 22, 2013), <http://www.epa.gov/climatechange/ghgemissions/sources.html> (transportation accounts for 28% of greenhouse gas emissions); *National Greenhouse Gas Emissions Data*, U.S. ENVTL. PROT. AGENCY (Apr. 2013), <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2013-Chapter-3-Energy.pdf> (cars and light trucks make up 61% of transportation carbon dioxide emissions).

5. DOE Press Release, *supra* note 2. See also MCKINSEY & CO., UNLOCKING ENERGY EFFICIENCY IN THE U.S. ECONOMY, at iii (2009).

6. Clean Air Act § 209, 42 U.S.C. § 7543 (2011); Energy Policy and Conservation Act of 1975, 49 U.S.C. § 32919 (2008).

7. Energy Policy and Conservation Act of 1975 § 327, 42 U.S.C. § 6297 (2011).

8. See *infra* part IV.

9. See *infra* part V.

Preemption doctrine should seek sensible policy outcomes, as opposed to easily administrable judicial rules. Rather than a static standard based only on textual analysis, courts should apply the principles that will promote overall economic efficiency when the statutory text itself does not precisely address the subject of the preemption inquiry.¹⁰ Since the main benefit of uniform standards is that they prevent localities from externalizing costs onto other states, that concern should be the focal point of a preemption analysis. If the disputed local policy does not implicate that concern, then federal law should not preempt the policy unless the statutory text unambiguously requires preemption. Unfortunately, courts have continued to undertake increasingly strained textual analyses rather than favoring good policymaking. This must change.

This article has two purposes. First, this article describes the current state of preemption jurisprudence in the automobile and building code energy efficiency areas. I highlight the different judicial interpretations of the same statutory text to show that, despite what courts may claim, the statutory preemption clauses are ambiguous as they relate to hybrid incentive schemes and flexible green building codes. Second, in this article I argue that courts should adopt a narrower and more nuanced approach to preemption in these areas. Rather than attempt to determine Congress's intended scope, the courts should readily declare the scope ambiguous and adopt a presumption against preemption in energy efficiency cases, allowing that presumption to be overcome only if courts find that the local scheme will lead to externalized costs that inhibit overall economic efficiency. This approach would diminish the scope of preemption under the CAA and EPCA and lead to better overall maintenance of energy efficiency standards.

Part II provides background on energy use and the merits of energy efficiency as a policy, including concerns about both the rebound effect and the energy paradox. Part III lays out the theoretical principles behind this article's proposed approach to preemption. Part IV examines recent preemption decisions on hybrid taxi regulations. Part V reviews the recent case law on green building codes and preemption of appliance efficiency standards. Finally, Part VI argues for a more pragmatic and deferential approach to preemption in those two areas.

II.

ENERGY EFFICIENCY AS A RESOURCE, AND THE REBOUND EFFECT AND ENERGY PARADOX CONCERNS

Before coming to the preemption questions, it is worth briefly noting why energy efficiency¹¹ policy holds such promise and therefore deserves a close

10. Cf. Stephen Breyer, *Our Democratic Constitution*, 77 N.Y.U. L. REV. 245 (2002) (arguing that courts should adopt a less "legalistic" and more "consequential" approach, in keeping with ancient principles of liberty).

11. Energy efficiency refers to the amount of energy required to produce a certain amount of work. See, e.g., *Energy Efficiency*, INTERNATIONAL ENERGY AGENCY, <http://www.iea.org/topics/energyefficiency/> ("Something is more energy efficient if it delivers

look. Buildings and automobiles consume nearly two-thirds of the energy used in the U.S.¹² They are a principal target—along with the sources of energy themselves—for reducing emissions of a variety of pollutants, particularly greenhouse gases (GHGs). Buildings lead the way, requiring 40% of our energy and producing roughly 40% of our GHG emissions.¹³ Automobiles come in at just under 20% of our consumption and GHG emissions.¹⁴ One approach to sustainability, which is beyond the scope of this article, is to make the sources of energy less environmentally harmful. Another approach, with a more immediate potential payoff, is to reduce the overall demand for energy. Reductions in demand can come from reducing the consumption of energy-consuming items, for example, by using cars less or making buildings smaller, or from maintaining consumption while increasing the energy efficiency of those items.

Increasing efficiency not only offers a way to reduce energy demand and its various costs significantly, but also offers enormous potential payoffs, both economically and environmentally: McKinsey & Co. estimated that a comprehensive and multidimensional program to spur energy efficiency could save up to 1.2 trillion dollars in energy costs in a little over a decade, based on an initial investment of less than half that amount, and could “potentially abat[e] up to 1.1 gigatons of greenhouse gases annually.”¹⁵

The promise of energy efficiency has come into question, however, based on real-world observations that suggest efficiency investments may not reap the rewards predicted by theoretical models. Two main concerns are whether efficiency gains will lead to increased consumption rather than conservation (the rebound effect), and consumer decisions to make seemingly suboptimal investments in energy efficiency (the energy paradox). However, neither one of these concerns significantly changes the viability of increasing efficiency.

A. The Rebound Effect

The basic theory of the “rebound effect” is that efficiency measures that decrease the cost of goods lead to increased consumption (of the specific good and in general), which can diminish or even eliminate the conservation benefits of the measures.¹⁶ Recent research generally indicates that the rebound effect

more services for the same energy input, or the same services for less energy input.”).

12. See *supra* notes 2–4 and accompanying text.

13. See DOE Press Release, *supra* note 2; Edna Sussman, *Reshaping Municipal and County Laws to Foster Green Building, Energy Efficiency, and Renewable Energy*, 16 N.Y.U. ENVTL. L.J. 1, 8 (2008).

14. See *supra* note 4 and accompanying text.

15. MCKINSEY & CO., UNLOCKING ENERGY EFFICIENCY, *supra* note 5, at iii (noting that “if executed at scale, a holistic approach would yield gross energy savings worth more than \$1.2 trillion, well above the \$520 billion needed through 2020 for upfront investment,” and would reduce roughly twenty-three percent of projected energy demand). See also MCKINSEY & CO., REDUCING U.S. GREENHOUSE GAS EMISSIONS: HOW MUCH AT WHAT COST?, at 67 (2007).

16. A basic example is that when automobile fuel economy increases, drivers will spend less money for gas. This means more money in the drivers’ pockets. They will spend some of this

does exist for energy efficiency measures, but does not come close to approaching the 100% or backfire level, at which greater efficiency would have no effect on overall energy consumption.¹⁷ Household heating and cooling, which represents a major portion of household energy use in the developed world, exhibits direct rebound effects¹⁸ of around 30%, meaning about 30% of energy savings are lost to increased use.¹⁹ For automobile use, the direct effect estimates range from 10% to 30%. Simply put, a small portion of the efficiency gain is used for increased consumption but most of it is conserved.²⁰

B. The Energy Paradox

A second concern is that although efficiency measures appear to offer clear economic advantages, private actors routinely underinvest in efficiency, an outcome dubbed the “Energy Paradox.”²¹ According to most economists, the

money on more gas—they will drive more than they would have if fuel economy hadn’t improved—which represents the “rebound.” It does not mean that the efficiency gain is moot; rather, it simply means that not all of the efficiency gain goes towards reducing consumption or emissions. “Backfire,” also known as the “Jevons Paradox,” is a theorized economy-wide effect in which the rebound swallows the entire efficiency gain, and more. The Jevons Paradox says that more efficient products and processes allow society to grow, which leads to greater overall energy consumption. *See, e.g.,* UK ENERGY RESEARCH CENTRE, THE REBOUND EFFECT: AN ASSESSMENT OF THE EVIDENCE FOR ECONOMY-WIDE ENERGY SAVINGS FROM IMPROVED ENERGY EFFICIENCY 3 (2007). In other words, the drivers in the hypothetical scenario would spend the money they saved on fuel to buy other products, which require energy to produce, leading to an overall *increase* in total energy consumption despite the increased automobile efficiency.

Notably, a large rebound effect still means a boon for overall social welfare. It signifies that the efficiency measure did little to decrease energy use, but it created a large benefit for consumers, who used the savings on energy costs to increase their consumption. Thus efficiency gains increase social welfare regardless of rebound: the rebound level simply indicates how the efficiency gains are consumed by society. A larger rebound effect means greater income for consumers but less energy conservation, while a smaller rebound means less consumer windfall but more energy conservation and thus larger environmental benefits. *See, e.g., id.* at ix.

17. *See* KENNETH GILLINGHAM, RICHARD G. NEWELL & KAREN PALMER, RESOURCES FOR THE FUTURE, ENERGY EFFICIENCY ECONOMICS AND POLICY (2009); Kenneth A. Small & Kurt Van Dender, *Fuel Efficiency and Motor Vehicle Travel: The Declining Rebound Effect*, 28 ENERGY J. 1, 25 (2007) (estimating rebound effects for automobile fuel efficiency at 3.1%–15.3%).

18. The direct rebound effect is the portion of the energy efficiency gain in a certain sector that leads to increased demand in that sector, such as more efficient appliances leading to greater use of appliances. *See* UK ENERGY RESEARCH CENTRE, *supra* note 16, at 1–2.

19. *See* UK ENERGY RESEARCH CENTRE, *supra* note 16, at 34.

20. Furthermore, the indirect rebound effect is the additional portion of the energy efficiency gain in one sector that is consumed elsewhere in the economy, such as more efficient appliances leading to consumers (who saved money on the electricity usage of their appliances) driving more or shopping more. *See id.* at 1–2. The level of indirect rebound effects is uncertain. *See id.* at 48–50 (“at present the available evidence is too small to permit any general conclusions to be drawn”). *See also* Pedro Linares & Xavier Labandeira, *Energy Efficiency: Economics and Policy*, 24 J. ECON. SURVS. 573, 581–82 (2010) (“the estimates from different researchers point to a wide range of values,” including 5%–15%, 67%, 19% in Britain, 27% in Japan, and 50–130% in Scotland).

21. Adam B. Jaffe & Robert N. Stavins, *The Energy Paradox and the Diffusion of Conservation Technology*, 16 Resource & Energy Econ. 91 (1994). *See also* Linares & Labandeira, *supra* note 20, at 575–76.

explanation for this is twofold. In part, this behavior reflects a market failure,²² which typically requires government correction. It also reflects a “nonmarket failure,” in which the economic models do not fully account for individuals’ preferences and diversity, which makes the real-world outcome closer to optimal than it appears and offers a weaker argument for government intervention.²³

Policymakers differ in how to measure the socially optimal level of energy efficiency and the breadth of allowable justifications for government intervention.²⁴ The conventional approach preferred by conservative economists gives deference to free markets: it assumes that markets reflect consumers’ preferences, and that the government should only regulate in situations of market failure—essentially, when the free market is unable to allocate goods and services efficiently. Under this approach, a critical inquiry is whether the explanation for the energy paradox is a market or nonmarket failure.²⁵ While many advocates and individuals support regulation to achieve better environmental outcomes because it is a worthwhile investment on its own, even those who insist that regulation should only be used when the free market cannot achieve economically optimal outcomes—the conventional approach—should be satisfied that energy efficiency investments in automobiles and buildings fit the bill, for the reasons discussed below.

C. The Energy Paradox as Applied to Efficiency in Cars and Buildings

Principal-agent problems and informational deficiencies are two market failures that arise in the building market, and as market failures they require a regulatory solution.²⁶ Jaffe and Stavins explain that the principal-agent problem arises when the party making the efficiency investment will not reap the

22. A market failure occurs when the free market does not allocate goods and services optimally, and certain exchanges of resources could increase social welfare. *See, e.g., Market Failure*, INVESTOPEDIA, <http://www.investopedia.com/terms/m/marketfailure.asp> (last visited Dec. 18, 2012). A summary of the market failure explanations for an energy paradox, which include principal-agent dynamics, informational deficiencies, and uncertainty can be found in Jaffe & Stavins, *supra* note 21, at 98. *See also* AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, QUANTIFYING THE EFFECTS OF MARKET FAILURES IN THE END-USE OF ENERGY (2007) [hereinafter ACEEE report]; Linares & Labandeira, *supra* note 20, at 579.

23. A summary of the main nonmarket failure explanations for such an energy paradox, including individual learning costs and other transaction costs, high discount rates, and heterogeneity among individuals or firms in the market, can be found in Jaffe & Stavins, *supra* note 21, at 99. *See also* Antonio M. Bento, Shanjun Li & Kevin Roth, Discussion Paper 10-56, *Is There an Energy Paradox in Fuel Economy? A Note on the Role of Consumer Heterogeneity and Sorting Bias* 2 RESOURCES FOR THE FUTURE (2010) (finding consumer heterogeneity in valuation of future savings from improved fuel efficiency, which “may partly explain consumer undervaluation of future fuel costs”). *Cf.* Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. PA. L. REV. 613, 626–27 (1999) (noting that the costs of informational regulation may sometimes outweigh the benefits).

24. *See* GILLINGHAM, NEWELL & PALMER, *supra* note 17, at 7.

25. Jaffe & Stavins, *supra* note 21, at 120; Linares & Labandeira, *supra* note 20, at 580.

26. Jaffe & Stavins, *supra* note 21, at 115.

savings.²⁷ This may also be understood as an informational deficiency, in which homebuyers or renters lack a complete understanding of the value of efficiency investments. As a general rule, information about available energy efficient technologies is a public good, which may be underprovided by the market.²⁸ To the extent that a lack of information affects purchasing decisions, it creates a market failure that requires intervention.²⁹

Under either framing, this market failure has a profound impact in the building context. First, buyers and renters may not be able to ascertain the energy efficiency of a home easily; in particular, the energy efficiency of a building itself is difficult to verify (for example, it is relatively easier to see that a dishwasher is energy efficient than to verify the quality of roof insulation).³⁰ And even a buyer or renter that does take note of these efficiency investments may not value them accurately. The landlord–tenant relationship appears to exacerbate informational deficiency—while the tenant often pays the electricity bills, the landlord makes major efficiency-related purchasing decisions.³¹ Tenants are less informed about whether they have Energy Star appliances, for instance, and they self-report a lower level of energy-efficient appliances than homeowners.³² A study of appliance energy usage found that this particular informational barrier—representing 50% of total U.S. residential energy usage—affects much of the energy use in many major markets.³³

An equally significant problem is consumers' tendency to discount the future value of efficiency investments too greatly; in other words, they underestimate the future payoff of an investment in energy efficiency made today. This tendency has been demonstrated in markets like the residential lighting market,³⁴ and for automobile purchasers.³⁵ A recent study, which found that consumers are willing to pay sixty-one cents for every dollar in expected present value from a more fuel-efficient car, is perhaps the clearest recent

27. *See id.* at 98.

28. *Id.* But cf. Sunstein, *supra* note 23, at 626–27 (discussing the drawbacks of informational strategies).

29. Jaffe & Stavins, *supra* note 21, at 98.

30. *See* Lucas W. Davis, *Evaluating the Slow Adoption of Energy Efficient Investments: Are Renters Less Likely to Have Energy Efficient Appliances?* 2 (Nat'l Bureau of Econ. Research, Working Paper No. 16,114, 2010).

31. *See id.* at 4.

32. *Id.* at 3–4.

33. ACEEE report, *supra* note 22, at v–vi. Note that the market barrier measurement does not reflect the size of the market failure, but the study found that the market failure could be easily measured. The barrier reflects the scope of the principal–agent effects on energy use in U.S. markets. *See id.* A similar study found that thirty-five percent of residential energy use in the U.S. is affected by a principal–agent problem (encompassing informational deficiencies). *See* Scott Murtishaw & Jayant Sathaye, *Quantifying the Effect of the Principal-Agent Problem on US Residential Energy Use* ii–iii (Lawrence Berkeley Nat'l Lab., Working Paper No. 59,773, 2006).

34. ACEEE report, *supra* note 22, at vi.

35. Hunt Allcott & Nathan Wozny, *Gasoline Prices, Fuel Economy, and the Energy Paradox* 5 (MIT Ctr. for Energy and Env'tl. Policy Research, Working Paper No. 10-003, 2011).

indication that consumers undervalue investments in energy efficiency.³⁶ Consumers' failure to invest at an optimal level offers an explanation for the energy paradox that justifies a corrective policy intervention.³⁷

In sum, energy efficiency offers substantial economic and ecological gains at a low cost.³⁸ A major investment in energy efficiency could save up to half a trillion dollars in net energy costs in ten years and abate up to 1.1 gigatons of greenhouse gases every year.³⁹ Investing in energy efficiency is economically sound and produces an effectively emissions-free resource, yet the major potential gains remain largely unrealized. We ought to stop talking about *whether* to adopt these policies and start talking about *how* to adopt them,⁴⁰ which in turn depends on the rules for federal preemption of energy efficiency standards.

III.

MORE PRAGMATIC AND DEFERENTIAL PREEMPTION: FOCUSING ON NEGATIVE EXTERNALITIES

The Constitution declares federal law to be the supreme law of the land, thereby creating the basis for preemption doctrine.⁴¹ Preemption occurs when federal law and state or local law try to occupy the same space. Because of the Supremacy Clause of the Constitution, federal law always triumphs. Most of the preemption questions before courts thus involve whether there is truly a conflict between the federal law and the state law, which in turn involves determining the scope of the federal law. Preemption can be express or implied, depending on whether or not preemption is explicitly written into the federal statute. Implied preemption is further subdivided into field and conflict preemption: a local requirement is preempted if Congress intended to "occupy the field" of regulation in that particular area; if it did not, the local law is still preempted if its requirements create a "conflict" with the federal law.⁴² Thus a reviewing court traditionally will look first to whether the statute *expressly* requires preemption; if not, it then will assess whether Congress intended federal law to *occupy the field* and thereby preempt local law; if not, it then will assess whether the local law *conflicts* with federal law; and if not, then the local law is not

36. Allcott & Wozny, *supra* note 35, at 5.

37. And as auto manufacturers believe that consumers will not pay the full expected value for future fuel savings, the manufacturers cannot justify producing appropriately energy-efficient vehicles and will thus under-invest in the technology from the outset. See Allcott & Wozny, *supra* note 35, at 7. Neither heterogeneity nor the other nonmarket-failure explanations fully explains the paradox, principally because they do not disprove the market failure explanations.

38. MCKINSEY & CO., UNLOCKING ENERGY EFFICIENCY, *supra* note 5, at iii.

39. *Id.* (noting that "if executed at scale, a holistic approach would yield gross energy savings worth more than \$1.2 trillion, well above the \$520 billion needed through 2020 for upfront investment," and would reduce roughly twenty-three percent of projected energy demand).

40. Linares & Labandeira, *supra* note 20, at 582.

41. U.S. CONST. art VI, cl. 2.

42. See *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 507–08 (1996).

preempted. Both the CAA and EPCA contain express preemption clauses: “any [state] standard relating to the control of emissions from new motor vehicles” is preempted under the CAA;⁴³ any “[state] law or regulation related to fuel economy standards”⁴⁴ or state regulation “concerning the energy efficiency. . . of a covered product” is preempted under EPCA.⁴⁵ These clauses, which are the basis for preempting local energy efficiency programs, are the focus of this article.

Courts use several tools of statutory construction in making a preemption inquiry, and while any interpretation begins with the plain text, it rarely ends there. Both the CAA and EPCA have express preemption clauses, but the Supreme Court recently cast into doubt the relevance of the long-standing express/implied distinction, indicating that express preemption requires the same inquiry as implied preemption.⁴⁶ In other words, even an express preemption clause ultimately requires a court to review whether the federal statute sought to occupy the field or creates a conflict with local law. The meaning of the express preemption clause’s text is informed by the statutory purpose, structure, framework, and the like—all the same inputs as a court would use to determine whether preemption should be implied—thus, the inquiries run together for express and implied preemption. As such, courts must apply all the normal rules of statutory interpretation to determine the scope of preemption whenever a state or local regulation is alleged to conflict with a federal law.⁴⁷ Their interpretation is ostensibly guided by two rules of thumb: congressional purpose is the touchstone of preemption, and in the case of ambiguity courts should apply a presumption against preemption, as a reflection of federalism values.⁴⁸ Yet while these canonical rules are often cited in preemption cases, they may be little more than a judicial nod to precedent that obscures the policy concerns that are truly determinative in close preemption cases.⁴⁹ As Hills suggests, courts may find the text to unambiguously favor or prevent preemption merely as a cover (and as an easier explanation than finding it ambiguous and then relying on policy rationales). A policy-oriented approach to close preemption decisions is a

43. 42 U.S.C. § 7543(a) (2006).

44. 49 U.S.C. § 32919(a) (2006).

45. 42 U.S.C. § 6297(b) (2006).

46. See *Altria v. Good*, 555 U.S. 70 (2008). Accord RODERICK M. HILLS, JR., *Preemption Doctrine in the Roberts Court: Constitutional Dual Federalism By Another Name*, BUSINESS AND THE ROBERTS COURT (Jonathan Adler, ed., Oxford University Press, Forthcoming) (New York University School of Law Public Law Research Paper, 2011) (“Inclusion of a preemption clause typically does little to reduce this ambiguity of defining a forbidden conflict.”).

47. See *Medtronic*, 518 U.S. at 486 (“Congress’ intent, of course, primarily is discerned from the language of the pre-emption statute and the ‘statutory framework’ surrounding it. Also relevant, however, is the ‘structure and purpose of the statute as a whole,’ as revealed not only in the text, but through the reviewing court’s reasoned understanding of the way in which Congress intended the statute and its surrounding regulatory scheme to affect business, consumers, and the law.”) (citations omitted).

48. See, e.g., *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

49. See HILLS, *supra* note 46.

good thing,⁵⁰ but I argue that it should be transparent, rather than be obscured by ostensibly text-based interpretive canons. This means first (and more often) acknowledging that the text is ambiguous and then applying the presumptions that lead to the most efficient policy outcomes.

The CAA and EPCA impose uniform standards for cars and appliances, and thus may be said to create both a federal “floor” and “ceiling.” The “floor” is the minimum level of energy efficiency that cars and appliances must meet; the “ceiling” is the maximum. Thus uniform standards prevent states and municipalities from imposing either laxer or stricter energy efficiency requirements than the level set by the agencies empowered by congressional statute. The following subsections examine the nature of floor-and-ceiling preemption schemes, the apparent purpose of Congress in establishing them, and whether energy efficiency policy is well served by them. This will lay a foundation for the critique of several recent decisions on the CAA and EPCA preemption. In light of that critique, I will argue that preemption jurisprudence would lead to better energy efficiency policy if courts took a more deferential and pragmatic approach, focusing on cost externalization,⁵¹ to determine if preemption is proper in each instance. This would require courts to (1) read the statutory text more narrowly, thus finding the statute to explicitly and unambiguously preempt local schemes less often; to (2) apply a stronger presumption against preemption, which can only be overcome if the local scheme would create negative externalities; and then to (3) otherwise leave the local scheme intact.

A. The Merits of Uniform Standards for Preemption

Setting a uniform national standard brings a number of benefits. It protects manufacturers from facing a patchwork of state standards, which allows economies of scale in production that generally lead to both lower costs for the manufacturer and lower prices for the consumer.⁵² It prevents states from imposing the negative externalities of their own regulatory standard onto other states. Setting a single federal standard can also harness the expertise of the federal government if local conditions and preferences vary little.⁵³ These canonical benefits and detriments of uniformity do not apply equally in all contexts, however, and determining the proper scope of preemption requires a

50. See *id.* at 34–39. Cf. Breyer, *supra* note 10.

51. I use “cost externalization” and “negative externalities” interchangeably: both mean that a policy imposes costs on actors outside the jurisdiction that created the policy.

52. See Brian T. Burgess, *Limiting Preemption in Environmental Law: An Analysis of the Cost Externalization Argument and California Assembly Bill 1493*, 84 N.Y.U. L. REV. 258, 280 (2009).

53. See Richard L. Revesz, *The Race to the Bottom and Federal Environmental Regulation: A Response to Critics*, 82 MINN. L. REV. 535, 543–44 (1997). More precisely, it presumes that the advantages of a centralized standard set by federal experts outweigh the aggregate advantages from tailoring a standard to local preferences.

deeper analysis. In particular, a local policy that will not lessen the benefits of a uniform standard should be allowed to coexist with that federal standard and avoid preemption.

1. The Drawbacks of Uniform Standards as Compared to Federal Floors

When Congress enacts a federal standard, it can operate as a floor, a ceiling, or a uniform standard (both a floor and ceiling). A floor sets a minimum regulatory level, while a ceiling sets a maximum level. Both federal floors and federal ceilings prevent some states from adopting their preferred level of regulation,⁵⁴ but the effects of floors and ceilings are not identical. A critical and distinctive element of federal ceilings is that in practice they almost always appear in tandem with a federal floor,⁵⁵ perhaps because a ceiling on its own would often be politically untenable. (Consider the response if the federal government simply put a cap on the allowable level of food safety, for instance.)⁵⁶ A ceiling, in practice, is therefore a uniform standard—a floor and ceiling. This means that a ceiling effectively cuts state and local policymakers out of the decision-making process entirely, with the associated loss of their expertise.⁵⁷ It blocks any tailoring of standards to local preferences and it precludes state experimentation that can speed the pace of policy evolution across the country.⁵⁸ A federal floor *without* a ceiling, on the other hand, incentivizes firms to meet the standard in more efficient and diverse ways.⁵⁹ Since states can set a more stringent standard, a floor maintains their involvement in policymaking. If a federal floor can produce the same benefits as a uniform standard while allowing these other benefits to accrue to states and localities, then it appears to be a better choice for policymaking.

54. Burgess, *supra* note 52, at 271. Cf. Revesz, *supra* note 53, at 539.

55. See William W. Buzbee, *Asymmetrical Regulation: Risk, Preemption, and the Floor/Ceiling Distinction*, 82 N.Y.U. L. REV. 1547, 1592 (2007). Buzbee refers to the combination of a floor and ceiling as a “unitary” federal standard.

56. The likely outcome of such a proposal is that a powerful coalition would oppose it, and the public message would be so compelling that it would never stand a chance of enactment. In the instance of food safety, consumer advocates, public health advocates, farmers, and other food producers who already operate with reasonable protections against contamination would likely unite in opposition. More importantly, the public outcry in response to a message such as “Congress wants to *limit* how safe your food can be” would be swift and merciless.

57. David E. Adelman & Kristin H. Engel, *Adaptive Federalism: The Case Against Reallocating Environmental Regulatory Authority*, 92 MINN. L. REV. 1796, 1833 (2008). This assumes that state and local policymakers’ (including plaintiffs, interest groups, and industry) contributions to national policy are desirable. While the economies-of-scale in information gathering and expertise may make it more efficient to set some standards nationally, this is not foreclosed by state involvement. But absent uniform conditions throughout the country, it seems certain that input from state and local experts would benefit overall policy outcomes in some, if not all, decisions. Cf. Revesz, *supra* note 53, at 543–44.

58. See *Liggett Co. v. Lee*, 288 U.S. 517, 575 (1933) (Brandeis, J., dissenting).

59. See Buzbee, *supra* note 55, at 1588.

2. Public Choice Critique of Uniform Standards

Public choice theory offers an additional critique of federal ceilings (or federal uniform standards) and supports a presumption for federal floors.⁶⁰ The theory is based on three assumptions: first, that industry interests hold greater power than their adversaries (consumer groups, environmental groups, etc.); second, that all such interest groups would prefer a federal standard, rather than working to establish fifty separate state standards; and third, that industry will be cohesive in its preference for a federal ceiling standard.⁶¹ Thus, as a simple matter of leveling the playing field—or at least coming marginally closer to level—a presumption against federal ceilings is appropriate.

One critique of the presumption against federal ceilings is that industry's power may be so substantial that environmental laws only pass with industry support, as Revesz argues.⁶² But industry often gets involved only once it becomes clear that *some* standard is likely to be enacted, and then works to shape that standard to give itself the greatest advantage, which typically means pushing for a ceiling (in addition to a floor) in order to avoid any further requirements once the standard has been set.⁶³ Industry's support is therefore likely to be less cohesive in setting a federal floor standard: the benefits to different firms will depend on the level of the floor, and thus firms are more likely to disagree about the proper standard.⁶⁴ Again, this may not level the playing field, but by weakening the dominant public choice player it should result in a policy outcome that is closer to optimal.⁶⁵ This bolsters a presumption against floor-and-ceiling preemption when congressional intent is ambiguous.

B. State and Local Regulations Prompt Updates to Federal Policy

An additional argument against uniform floor-and-ceiling standards is that finding less preemption may have national policymaking benefits in addition to

60. A third critique involves a rights-based approach to environmental protection. This common justification for environmental standards, particularly in the environmental justice movement, is that every person is entitled to a minimum level of public health protection. Put another way, no one should be exposed to excessive health risks from pollution. Professor Revesz criticizes the effectiveness of this approach, arguing that setting environmental risk standards on a pollutant-by-pollutant basis at the federal level does not address the *overall* environmental risks experienced by any given person. See Revesz, *supra* note 53, at 544–45. To properly protect public health would require a comprehensive risk management approach (one that went beyond mere environmental protection to encompass all health risks). The effect is like the proverbial squeezing of a balloon: the risk squeezed in one place will bubble out in another.

61. Adelman & Engel, *supra* note 57, at 1836–37.

62. Revesz, *supra* note 53, at 571. Firms may seek federal standards for a variety of reasons. In the environmental context, they may seek to extract rents from the government, erect barriers to entry for new firms, or entrench their own market share in industries that rely on large economies of scale. *Id.* at 571–74.

63. See Adelman & Engel, *supra* note 57, at 1838 n. 208.

64. *Id.* at 1838.

65. *Id.* at 1838–39.

furthering federalism values. Professor Roderick Hills makes a provocative case against preemption on the grounds that, in practice, state action is what prompts congressional and agency action on significant policy issues.⁶⁶ The various levels of government often act in response to each other, with a local action prompting a congressional response or vice versa. Our preemption doctrine should recognize and harness this interactive dynamic in order to improve the policymaking environment.⁶⁷ Moreover, our political system is structured to disfavor federal action by making it easier to block federal policy than to enact it.⁶⁸ Relatively weak political parties in the U.S. can rarely manage the horse-trading and concessions between broad coalitions that are required to enact significant reforms. The multiple countermajoritarian components of the federal structure also make it easier for a minority interest group to prevent a policy that it strongly disfavors than to enact one that it prefers.⁶⁹ This “Madison’s Nightmare” demonstrates how the federal system is built for gridlock.⁷⁰ Some of these are checks and balances rooted in the Constitution, of course, but their effect on policy nonetheless deserves attention when courts face statutory preemption questions.

Hills argues that courts should give a default preference to state and local regulation for health, safety, and the general welfare, because the affected business interests will then put the issue on the national agenda and demand action from Congress.⁷¹ Since business interests tend to favor preemption and tend to maintain more sustained pressure on federal lawmakers,⁷² our preemption jurisprudence ought to tilt in favor of states in order to reduce the power of business interests.⁷³ And agencies do not always consult states, even when a federal–state dialogue is mandated by Congress.⁷⁴ This supports a

66. Roderick M. Hills, Jr., *Against Preemption: How Federalism Can Improve the National Legislative Process*, 82 N.Y.U. L. REV. 1, 19–20 (2007).

67. *See id.* at 4.

68. *Id.* at 12–13.

69. *Id.* A countermajoritarian body is one that is structured so that a minority can hold decisive power over decisionmaking. Countermajoritarian bodies in the U.S. political system include the Electoral College, the Senate itself (based on the equal representation of small and large states), and the Senate filibuster, among others.

70. *Id.* (quoting Richard B. Stewart, *Madison’s Nightmare*, 57 U. CHI. L. REV. 335, 342 (1990)).

71. *Id.* at 1. Agencies themselves can often act as catalysts to put an issue before Congress, and as Professor Sharkey points out, Congress often punts to agencies on preemption determinations. *See* Catherine M. Sharkey, *Preemption by Preamble: Federal Agencies and the Federalization of Tort Law*, 56 DEPAUL L. REV. 227, 252–53 (2007). Thus the affected interests may need to appeal to agencies rather than seek an audience with Congress, but this nonetheless provides a pressure point in the case of ongoing agency inaction, as discussed below.

72. *See* Adelman & Engel, *supra* note 57, at 1826 (citing Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196, 1213 (1977)).

73. Hills, *supra* note 66, at 19–27.

74. *See* Sharkey, *supra* note 71, at 253–54.

general antipreemption canon in order to prod the federal policymaking apparatus into action.⁷⁵

As Hills's theory would predict, and despite the apparent ease in achieving greater energy efficiency, the federal government spent years neglecting efficiency standards. The Department of Energy (DOE) is charged with updating appliance efficiency standards under EPCA,⁷⁶ yet it missed all thirty-four statutory deadlines for setting energy efficiency standards prior to 2007.⁷⁷ The Energy Independence and Security Act⁷⁸ amended EPCA and seemingly required DOE to update appliance standards regularly.⁷⁹ Yet DOE interpreted the core provision requiring it to review appliance standards as limited to a narrow set of appliances, restricting the scope of its own ability to ensure optimal appliance efficiency.⁸⁰ Vehicle fuel efficiency standards have also slowly and haltingly been tightened by NHTSA, in parallel with EPA's emissions standards for mobile sources.⁸¹ On a promising note, however, the Obama administration's EPA and NHTSA have jointly updated emissions and fuel economy standards in a series of rulemaking actions in the past few years.⁸²

75. Hills's proposal is not the only approach to forcing agencies to deal directly with federalization. Sharkey notes that several penalty default rules could force Congress or agencies to deliberate fully over the scope of preemption. *Id.* For instance, requiring an express declaration of preemptive intent or a notice-and-comment period for any preemption statement would force agencies to make a more informed and detailed federalism determination and lead to better overall policymaking. *See id.* at 256–57.

76. 42 U.S.C. §§ 6291–6297 (2012).

77. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07042, ENERGY EFFICIENCY: LONG-STANDING PROBLEMS WITH DOE'S PROGRAM FOR SETTING EFFICIENCY STANDARDS CONTINUE TO RESULT IN FOREGONE ENERGY SAVINGS 5 (2007), available at <http://www.gao.gov/new.items/d0742.pdf>.

78. Pub. L. 110-140 §§ 301–325 (codified as amended in scattered sections of 42 U.S.C. (2007)).

79. *See* 42 U.S.C. §§ 6295(m), 6313(a)(6) (2006) (part of the Energy Independence and Security Act—in nearly identical language, both subsections require that DOE publish either a notice of proposed rulemaking for a new standard or a notice that the standard does not need to be updated not later than six years after issuance of any final rule establishing or amending a standard for a covered product). Subsection 6295(m) applies to consumer appliances, while § 6313(a)(6) applies to commercial and industrial appliances.

80. *See* 74 Fed. Reg. 36,312, 36,321 (July 22, 2009) (to be codified at 10 C.F.R. pt. 431) (interpreting 42 U.S.C. § 6313(a)(6) (2006) to exempt industrial appliance standards from the required review every six years if the standards were last updated more than six years prior to passage of EISA, and rejecting a comment from the Appliance Standards Awareness Project arguing that DOE has the authority to amend such standards).

81. For instance, NHTSA issued a rule in 2006 setting new CAFE (corporate average fuel economy) standards for light trucks and was overturned by the Ninth Circuit for failing to consider the effect of the rule on greenhouse gas emissions in its cost-benefit analysis. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008). *See also* Maureen Feighan & Steve Pardo, *Cheney: Bush Won't Change Fuel Standards*, DETROIT NEWS, June 19, 2001, at D1 (describing Vice President Dick Cheney's announcement that EPA will not tighten federal fuel efficiency standards); NATURAL RESOURCES DEFENSE COUNCIL, *Bush Administration Fails to Boost Automobile Efficiency*, http://www.nrdc.org/bushrecord/2002_04.asp# (last visited Oct. 2, 2013) (NHTSA misses 2002 deadline for issuing new fuel efficiency standards for light trucks for model year 2004).

82. Robert Meltz, CONG. RESEARCH SERV., FEDERAL AGENCY ACTIONS FOLLOWING THE

DOE recently issued a notice of data availability and request for public comment on appliance efficiency standards⁸³ and entered into a memorandum of understanding with an industry group to update standards.⁸⁴ But the track record suggests that such momentum may not be long-lived.

To be effective, standards should be updated regularly.⁸⁵ A regime of limited preemption would prompt agencies to review energy efficiency standards more regularly; it would allow state and local policymakers to prod the federal government toward the action necessary to achieve effective efficiency standards.

C. Focusing on Negative Externalities for Energy Efficiency Preemption

The preceding sections describe the rationale for finding less robust preemption, particularly in the instance of uniform federal standards. Now I examine why a focus on negative externalities makes sense for determining the scope of that preemption, first in general, and then in the energy efficiency context in particular.

1. Negative Externalities

Federal regulatory ceilings prevent states from externalizing costs onto other states via in-state regulation. The concern is that by not fully internalizing all costs, the regulating state may adopt an inefficient level of regulation. Since this is a negative externality (imposing a cost on others, rather than a benefit), the state may over-regulate. This creates a suboptimal level of regulation nationwide even though the state is acting rationally from its own perspective. For instance, a state with no refrigerator manufacturing industry could adopt a higher appliance energy efficiency standard, seeking the economic and ecological benefits of energy conservation and bearing minimal new costs. Such a regulation can impose inefficiency, and therefore costs, in three major ways: (1) by eliminating some of the economies of scale in manufacturing, which imposes costs in every state (including the state that set the regulation, and thus it would internalize only a small fraction of these costs); (2) by retaining economies of scale but forcing some states to accept a higher level of regulation than they

SUPREME COURT'S CLIMATE CHANGE DECISION (2011) (presenting a chronology of federal actions that includes rulemaking for new emissions and fuel economy standards for cars and light trucks for model years 2011–16, Tailpipe Rule, 75 Fed. Reg. 25,324 (May 7, 2010); for medium- and heavy-duty trucks, 74 Fed. Reg. 74,152 (Nov. 30, 2010); and an intended rulemaking for cars and light trucks for model years 2017–2025, 75 Fed. Reg. 62,739 (Oct. 13, 2010)).

83. See Energy Conservation Program for Certain Industrial Equipment: Energy Conservation Standards for Commercial Heating, Air-Conditioning, and Water-Heating Equipment, 76 Fed. Reg. 25,622 (May 5, 2011).

84. See Ari Natter, *Energy Department, Engineers Group Agree To Promote Efficiency Standards for Buildings*, BNA ENV'T REP. (July 29, 2011), <http://www.bna.com/environment-reporter-p4885/>.

85. Linares & Labandeira, *supra* note 20, at 584.

would prefer (e.g. if a large state imposes the regulation and it becomes cheaper for the manufacturer simply to meet that higher efficiency standard, the manufacturer may do so); or (3) by raising the compliance costs to the manufacturer when it cannot pass all of those costs through to in-state consumers.⁸⁶

But this antiexternalization argument for federal ceilings—its main justification—is relevant only when state regulation will actually impose such costs. Thus, each potential instance of preemption should be inspected closely. If manufacturers can comply with a state regulation without changing their production processes, then this minimizes the first two concerns: economies of scale can be retained without forcing higher standards on states that do not prefer them.⁸⁷ This may reflect either a flexible production process or that a variety of products are already commercially available. The third cost-externalization concern—compliance costs that must be absorbed by the manufacturer rather than in-state consumers—is minimized when demand in the state is highly inelastic.⁸⁸ For example, if consumer demand for refrigerators will vary little with price changes, then the manufacturers will be able to pass along nearly all the additional compliance costs to the purchaser. Whether a local policy imposes externalities determines for courts whether it will impede the principal goals of a uniform federal standard.

Setting uniform federal standards serves the preeminent goal of economic efficiency by preventing states from externalizing a range of costs. This suggests that when states or local governments seek to improve energy efficiency, if their approach is not preempted by the plain text of a federal statute, then the scope of preemption should (ideally) turn on whether or not the circumstances seem to allow undesirable cost externalization. If they do not, then there is no need for preemption. In short, preemption should be more pragmatic.⁸⁹ Rather than hew

86. Burgess, *supra* note 52, at 277–81. See also Revesz, *supra* note 53, at 544. This concern arises for any additional compliance costs that were not taken into account when the state set its standard.

87. Burgess, *supra* note 52, at 281–83.

88. *Id.* at 283. “Elasticity” indicates how readily a change in price leads to a change in buying: an inelastic good can change price without much change in the rate at which the market will purchase that good. See INVESTOPEDIA, “Elasticity,” <http://www.investopedia.com/terms/e/elasticity.asp>.

89. See Thomas W. Merrill, *Preemption and Institutional Choice*, 102 NW. U. L. REV. 727, 742 (2008) (“The Court’s doctrine and its rhetoric in most preemption cases seek to portray preemption as being little different from a routine exercise in statutory interpretation. . . . And nowhere does the Court’s doctrine invite litigants or judges to consider pragmatic arguments for or against federal uniformity or state diversity, which many commentators believe are of paramount importance in resolving displacement decisions. In a word, the Court’s preemption doctrine is substantively empty. This emptiness helps mask the fact that courts are actually making substantive decisions in the name of preemption. The very emptiness of this doctrine also impoverishes the type of record that litigants develop for courts in preemption cases, which plausibly means that these cases are not as well decided as they would have been under a different kind of doctrine.”).

to a bright line rule, courts should recognize that the preemption standard may vary depending on the area of regulation—and that this will produce better overall policy outcomes.

2. Putting the Preemption Question to the Courts

Shifting to a more functional approach to preemption raises the question of how to perform this functional assessment. Several scholars have posited that the question to ask is not “how” but “whom.”⁹⁰ The answer is typically that federal agencies—as opposed to Congress and the courts—are best able to say whether a federal policy requires broad or narrow preemption in order to achieve its goals.⁹¹ Professor Merrill uses an institutional approach in concluding that courts should remain the primary institution for resolving preemption controversies, but also that courts should draw on agencies’ expertise in making pragmatic determinations and defer to agencies’ fact finding on the relevant issue.⁹² In Professor Sharkey’s model,⁹³ the relevant question is not what policy principles should guide preemption but which actor is best able to make the decision; she notes that agencies can communicate their views via direct interpretation or as amici in court cases.⁹⁴

Merrill’s approach is the closest analog to the proposal in this article.⁹⁵ Indeed, I support Sharkey and Merrill’s proposed deference to agencies in principle, but that deference can only operate when agencies have indicated their stance on preemption. When neither Congress nor the agencies have provided the courts with sufficient data to give a clear answer on preemption, as in the energy efficiency realms at issue here, the courts themselves should inquire whether a state standard is likely to create negative externalities.

Professor Hills takes issue with an approach similar to the one proposed here in that entrusting the judiciary to make policy judgments about efficiency in order to create a presumption *for* preemption is putting the question to the wrong

90. See Catherine M. Sharkey, *Inside Agency Preemption*, 110 MICH. L. REV. 521 (2012); Merrill, *supra* note 89; Catherine M. Sharkey, *Products Liability Preemption*, 76 GEO. WASH. L. REV. 449 (2008).

91. See Sharkey, *Inside Agency Preemption*, *supra* note 90; Merrill, *supra* note 89. *But cf.* Hills, *Against Preemption*, *supra* note 66. Hills argues that states and localities should be empowered to enact policies that will in turn prompt Congress to review federal standards. I take his approach to be most compelling as an argument for less preemption in general, however, than as an argument that *state and local* governments are the institutions best able to assess whether a *federal* policy is well served by preemption.

92. Merrill, *supra* note 89, at 759.

93. Sharkey, *Products Liability Preemption*, *supra* note 90, at 479.

94. *Id.*

95. See Merrill, *supra* note 89, at 759 (“The best solution would seem to be to rely on courts as the primary institution for resolving preemption controversies and to augment their representational and pragmatic capacities by drawing upon other institutions, notably the federal agencies.”).

institutional actor.⁹⁶ It is difficult to assess whether a local policy is likely to change manufacturing practices in a national business and thereby lessen the economy of scale. But, as Hills points out, if the point is to best serve the ultimate purposes of Congress in enacting the statute, it is at least the correct question for courts to answer.⁹⁷ If the text of a statute is ambiguous, courts have little guidance, and thus should favor an approach that leads to the best overall policy outcomes.⁹⁸ Nothing here should suggest that this is an easy inquiry, but merely that it is the right one.

The balance of this article will explore recent decisions on green taxis and green building codes in light of my proposed focus on cost externalization for a preemption inquiry. The cases I examine are the most recent federal decisions in the green taxi and green building code areas. Since the two courts in each area have arrived at opposite results, they underscore that the statutory preemption clauses do not speak clearly in these areas. These cases exemplify the problem with continuing the current jurisprudential approach. My proposal is for courts to acknowledge the ambiguity of the statutory text, find explicit preemption in fewer cases, and transparently place the focus on the policy concern of negative externalities to determine when preemption is proper.

IV.

AUTOMOBILE FUEL ECONOMY AND GREEN TAXICABS

The efficiency of American automobile engines affects the global environment and economy: our automobiles produce about seventeen percent of all the greenhouse gases produced in the U.S. and consume nearly one-fifth of our supply of energy.⁹⁹ The environmental aspects of the technology for this massive sector of our economy are governed, in large part, by the CAA and EPCA. Both the CAA and EPCA create uniform standards for emissions by cars and other vehicles, preempting state and local requirements.¹⁰⁰ Relevant legislative history indicates that, in passing EPCA, Congress sought to insure “major improvements in automobile fuel economy” but at the same time avoid imposing “impossible” economic burdens on the automobile manufacturers or

96. See Hills, *supra* note 66, at 8.

97. See *id.* at 7.

98. Furthermore, Hills worries that finding preemption too easily would lessen the pressure on federal actors to maintain optimal standards and likely lead to even greater stagnation in the national policymaking arena. *Id.* at 6–9. Given the institutional checks and balances that tend towards gridlock at the federal level, see *supra* note 70, a default rule that favors preemption would put greater power in the hands of the federal policymakers, lessening their incentive to maintain and update standards. See *id.* Although Hills makes a fair point, the proposed solution in this article, which opts for a presumption *against* preemption unless the local policy is likely to externalize costs, does not implicate Hills’ second concern.

99. See *supra* note 4 and accompanying text.

100. Federal emissions standards under the CAA preempt “relate[d]” state and local standards. 42 U.S.C. § 7543 (2006). Federal fuel efficiency standards under EPCA preempt state and local laws and regulations “related to fuel economy standards.” 49 U.S.C. § 32919 (2006).

“unduly limiting consumer choice” in car purchases.¹⁰¹ Indeed, the debate over automobile standards has largely been settled in favor of a federal approach led by the EPA and NHTSA, with the caveat that the CAA allows California to set stricter emissions standards, which other states can then adopt, contingent on an EPA waiver.¹⁰² Under the federal approach, car manufacturers get the benefit of economies of scale for just one or two standards, consumers get the benefit of more product choices, and citizens get a national standard that is calibrated to maximize net benefits, which was presumed to include a major increase in fuel efficiency at the time EPCA was enacted.¹⁰³

But what exactly is a “standard”? The answer is critical: the definition of “standard” determines the scope of preemption under EPCA, as EPCA preempts any “[state] law or regulation related to fuel economy standards.”¹⁰⁴ Yet defining “standard” is harder than it looks, and courts in recent cases have gotten it wrong, highlighting the need for a less formulaic and more pragmatic approach. Focusing on externalities, as I propose, would help correct these errors.

The Supreme Court in *Engine Manufacturers Ass’n v. South Coast Air Quality Management District* began expanding the definition of “standards.” This expansion was continued by several lower federal courts, and threatens to foreclose local policy choices in ways that are at odds with congressional intent and sensible preemption jurisprudence. The decisions may ultimately lead to the invalidation of legitimate local energy efficiency schemes. In *Engine Manufacturers*, the Supreme Court found that a requirement to purchase readily available hybrid vehicles was as much a “standard” under CAA preemption as a requirement to manufacture such vehicles.¹⁰⁵ The Court explicitly avoided two questions: whether voluntary incentive programs could similarly represent “standards” that could be preempted, and whether states were exempt in their capacity as market participants rather than regulators.¹⁰⁶ In *Metro Taxicab II*, the Second Circuit extended the definition of a preempted standard under EPCA to include voluntary incentive programs that were based entirely on fuel economy.¹⁰⁷ A recent district court decision in the Fifth Circuit, *ATO v. Dallas*, took a less expansive view of preemption and upheld a voluntary incentive

101. See H.R. REP. NO. 94-340, at 87 (1975), *reprinted in* 1975 U.S.C.C.A.N. 1762, 1849.

102. 42 U.S.C. § 7543 (b) (2006).

103. See H.R. Rep. No. 94-340, *supra* note 101, at 87 (“The Committee feels that the necessity for insuring major improvements in automobile fuel economy is so clear that legally enforceable requirement [sic] respecting improvement of fuel economy must be imposed.”). See also *Ophir v. City of Boston*, 647 F. Supp. 2d 86, 93 (D. Mass. 2009).

104. 49 U.S.C. § 32919(a) (2006).

105. *Engine Mfrs. Ass’n v. S. Coast Air Quality Mgmt. Dist.*, 541 U.S. 246, 259 (2004).

106. *Id.* at 258–59.

107. *Metro Taxicab Bd. of Trade v. City of New York (Metro Taxicab II Circuit)*, 615 F.3d 152, 158 (2d Cir. 2010), *cert. denied*, 131 S. Ct. 1569 (2011).

program based entirely on fuel economy.¹⁰⁸ Both *Metro Taxicab II* and *ATO* claim to rely only on the statutory text¹⁰⁹ and yet arrive at opposite results, highlighting the ambiguity in the text and the likelihood that courts are relying on something other than a textual analysis in these cases.

A better approach, which is more faithful to the ultimate purpose behind creating a uniform federal standard, would instead (1) interpret the word “standard” more narrowly, such that preemption is ambiguous as applied to local incentive schemes; (2) apply a presumption against preemption, such that only schemes that create negative externalities would be preempted; and (3) otherwise find that a local incentive scheme avoids preemption. That approach is explained more fully in Part VI. First, I examine recent case law.

A. Engine Manufacturers and the New Standard for “Standards”

In 2000, the South Coast Air Quality Management District, the political subdivision responsible for air pollution control in the Los Angeles area, enacted “Fleet Rules” that required certain public and private entities to purchase more fuel-efficient vehicles.¹¹⁰ The rules governed several enterprises related to the public interest, including street sweeping, airport passenger transportation, and public transit.¹¹¹ They included a mix of public and private operators.¹¹² These operators were required to purchase more fuel-efficient vehicles, but this requirement was limited to commercial availability: they had to choose “the least polluting of [California Air Resources Board]-certified, available vehicles,” according to the District Court.¹¹³ Since the Fleet Rules were limited to available vehicles and restricted only purchases, not manufacturing standards or sales, the District Court found that the rules did not represent preempted standards under the CAA.¹¹⁴ The Ninth Circuit affirmed.¹¹⁵

The Supreme Court reversed, with Justice Scalia declaring that the Fleet Rules purchase requirements were standards and were preempted because they used criteria that included vehicle emissions.¹¹⁶ The Court asserted that Section 209 of the CAA “is categorical” and admits of no exception.¹¹⁷ While the Court correctly noted that a purchase requirement that demanded a specific type of

108. *Ass’n of Taxicab Operators v. City of Dallas*, 760 F. Supp. 2d 693, 696 (N.D. Tex. 2010).

109. *See Metro Taxicab II Circuit*, 615 F.3d at 158; *Ass’n of Taxicab Operators*, 760 F. Supp. 2d at 696–99.

110. *Engine Mfrs.*, 541 U.S. at 248–49.

111. *Id.*

112. *Id.*

113. *Engine Mfrs. Ass’n v. S. Coast Air Quality Mgmt. Dist.*, 158 F. Supp. 2d 1107, 1117 (D. Cal. 2001), *vacated and remanded by* 541 U.S. 246 (2004).

114. *Id.*

115. *Engine Mfrs. Ass’n v. S. Coast Air Quality Mgmt. Dist.*, 309 F.3d 550 (9th Cir. 2002).

116. *Engine Mfrs.*, 541 U.S. at 253.

117. *Id.* at 256.

engine would be functionally equivalent to a sale or manufacturing requirement on the automaker, it adopted a broad statutory definition of “standards,” including even local schemes that use fuel efficiency among their “criteria.”¹¹⁸ The Fleet Rules included mandates on private actors, so, the Court insisted repeatedly, the decision did not necessarily entail preemption of voluntary incentive programs.¹¹⁹ Yet following this decision, any reference to fuel efficiency in a local regulation may lead to EPCA preemption, as the later *Metro Taxicab* cases confirm.¹²⁰

B. Metro Taxicab II: *A Slippery Slope*

The majority of the famous yellow taxicabs in New York City are owned by corporate entities, which lease them to cab drivers on a shift-by-shift basis.¹²¹ The City Charter vests the New York Taxicab and Limousine Commission (TLC) with broad authority to regulate the city’s taxicab fleet,¹²² and TLC began regulating the shift-by-shift lease rates in 1996, generally using lease caps to set a maximum per-shift charge.¹²³ Drivers pay the fleet owner to lease the cab and then the drivers pay for the cost of fuel during their shift.¹²⁴ With a discrete and limited number of licensed taxicabs allowed in New York City,¹²⁵ the fleet owners have an effective monopoly, which allows them to capture virtually the entire profit margin and gives them minimal incentive to seek more fuel-efficient taxicabs. This creates a potential market failure based on the principal-agent dynamic between drivers and fleet owners.¹²⁶

1. The City’s Rule

TLC instituted a rule in 2009 that provided financial incentives to fleet owners for using and leasing hybrid vehicles.¹²⁷ The rule phased in new lease

118. *Id.* at 253.

119. *Id.* at 258–59.

120. A strong argument can be made that the Court in *Engine Manufacturers* meant for “criterion” to be within the larger category of purchasing or manufacturing requirements, as opposed to all regulations. See *Engine Mfrs.*, 546 U.S. at 253. Such a reading would exclude incentive schemes, which are regulations but not requirements, from the ambit of the Court’s decision. But several subsequent cases in lower federal courts failed to take this approach.

121. Declaration of Ray A. Mundy at ¶ 21, *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II District)*, 633 F. Supp. 2d 83 (S.D.N.Y. 2009) (No. 08 Civ. 7837).

122. N.Y.C. CHARTER § 2303.

123. Declaration of Ray A. Mundy at ¶¶ 26–27, *Metro Taxicab II District*, 633 F. Supp. 2d 83 (No. 08 Civ. 7837).

124. See *id.* at ¶ 40.

125. See New York Taxicab & Limousine Commission, *About TLC*, <http://www.nyc.gov/html/tlc/html/about/about.shtml> (last visited Aug. 18, 2011).

126. See *supra* notes 34–35 and accompanying text (suggesting that the driver-owner relationship may be affected by both principal-agent and informational market failures).

127. *Metro. Taxicab Bd. of Trade v. City of New York (Metro. Taxicab II Circuit)*, 615 F.3d 152, 155 (2d Cir. 2010). The *Metro Taxicab* line of cases began in 2007, with the TLC’s first attempt to green the city taxicab fleet by setting a minimum fuel economy standard for new cabs.

caps over two years. A lease cap is the “maximum dollar amount per shift for which taxis can be leased.”¹²⁸ By 2011, under the rule, fleet owners could charge up to \$3 more per shift when leasing a hybrid cab to a taxi driver and could charge \$12 less per shift when leasing a nonhybrid, for a difference of \$15 per shift per cab.¹²⁹ The City reasoned that, first, it wanted more hybrids among its iconic and highly visible taxi fleet,¹³⁰ and second, it wanted to force fleet owners to internalize the costs of their vehicle choices,¹³¹ in light of the apparent principal–agent market failure described above. The trade association challenged only the reduction in lease caps for nonhybrids.¹³²

2. The Federal Court Decisions Enjoining the City’s Rule

The District Court enjoined the City’s rule, finding that the reduction in nonhybrid lease caps was a “de facto mandate” based on fuel economy.¹³³ The decision contains multiple omissions that cast doubt on its soundness. The court first dispensed with the City’s argument for correcting the market failure, concluding that TLC simply sought to rationalize its policy preference for hybrids—without explaining why such a preference was necessarily a problem.¹³⁴ The court made no inquiry into whether TLC had properly determined the actual costs of the market failure in setting the lease caps,¹³⁵ thus avoiding the question of whether it was rationalizing an *inappropriate* (that is, not economically justified) preference for hybrids. Turning to the rule’s impact, the court relied on the trade association’s expert testimony to find that the new lease caps would diminish nonhybrid cab owners’ profits by up to seventy-six percent.¹³⁶ “A sensible business person” would always choose the more profitable option, declared the court,¹³⁷ although it made no finding as to when a

Metro. Taxicab Bd. of Trade v. City of New York, 2008 WL 4866021, at *2 (S.D.N.Y. 2008). The fleet owners’ trade association, Metropolitan Taxicab Board of Trade, challenged the new rule as preempted under EPCA and the CAA and won a preliminary injunction based on preemption under EPCA. *Id.* at *14–*15. Rather than appeal the decision, now known as *Metro Taxicab I*, the TLC repealed its rule and issued the new rule in 2009. The subsequent challenge is therefore *Metro Taxicab II*.

128. Metro. Taxicab Bd. of Trade, 2008 WL 4866021, at *2.

129. *Id.*

130. Metro. Taxicab Bd. of Trade v. City of New York (*Metro Taxicab II District*), 633 F. Supp. 2d 83, 87 (S.D.N.Y. 2009).

131. See Petition for Writ of Certiorari, City of New York v. Metro. Taxicab Bd. of Trade, 2010 WL 4494142, at *4 (U.S. 2010).

132. *Metro Taxicab II District*, 633 F. Supp. 2d at 85.

133. *Id.* at 106.

134. *Id.* at 99 (noting that the rule allowed TLC to change lease caps based on “appropriate policy considerations,” an amorphous standard that did not require “substantial evidence”).

135. *Id.*

136. *Id.*

137. *Id.* at 99–100 (adding, “the Lease Cap Rules’ purpose is to incentivize the purchase of hybrids, while at the same time provide a very meaningful disincentive to the continuing use of

sensible businessperson would no longer choose a more profitable option. Thus the court offered no explanation for why some fleet owners, prior to the lease cap rule, freely chose hybrids and were foregoing over \$3,000 in annual profit according to the taxicab association's own expert.¹³⁸ Nevertheless, the district court found that the cap was preempted by EPCA.

Casting a suspicious judicial eye on TLC's motives, the court failed to consider facts that could have allowed a more nuanced and potentially more accurate assessment of the lease caps. It is clear that drivers bore the fuel costs, and equally clear that some differential in lease caps based on fuel costs would impose some of those costs on the fleet owners, who make vehicle purchasing decisions.¹³⁹ The taxicab association's own expert indicated that the lease cap differential would make fleet owners "roughly indifferent" between hybrids and nonhybrids.¹⁴⁰ For example, almost half of all licensed taxis are owner-operated,¹⁴¹ and indeed their owners buy hybrids at a higher rate than fleet or corporate owners.¹⁴² Yet, the court did not engage the possibility of a market failure, nor that the "sensible" fleet owner who internalized all costs might buy a hybrid.¹⁴³ Instead, the court found that allowing such a local regulation with admittedly minor impacts would nonetheless "undo Congress's carefully calibrated regulatory scheme."¹⁴⁴

Rather than review these legal and policy gaps, the Second Circuit took the preemption standard a remarkable step further: it held that the mandate question was irrelevant because the lease caps "directly regulate[d]" based on fuel economy.¹⁴⁵ The court filled the gap left by *Engine Manufacturers*, and found that incentive schemes are "standards" under EPCA, and therefore subject to preemption.¹⁴⁶ The Second Circuit explicitly rejected the need for an inquiry

conventionally powered vehicles. The combined effect of the lease cap changes, and even the disincentive alone, constitutes an offer which cannot, in practical effect, be refused").

138. See Brief for Defendant-Appellant at 12, *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II Circuit)*, 615 F.3d 152 (2d Cir. 2010) (No. 09-2901).

139. Expert Report of Kurt G. Strunk, *Metro Taxicab Bd. of Trade v. City of New York (Metro Taxicab II District)*, 633 F. Supp. 2d. 83 (S.D.N.Y. 2009) (No. 08 Civ. 7837).

140. See Brief for Defendant-Appellant, *Metro Taxicab II Circuit*, *supra* note 138 at 11.

141. See *id.* at 21.

142. See Expert Report of Kurt G. Strunk, *Metro Taxicab II District*, *supra* note 139 (owner-operated taxicabs chose hybrids for 30–46% of their vehicles, while fleet owners chose hybrids for 24% of their vehicles).

143. See, e.g., *Metro Taxicab II District*, 633 F. Supp. 2d at 99. The court also intimated that such a policy-based approach to ratemaking had never been attempted before in the U.S., despite San Francisco having enacted a similar scheme that offered a \$7.50 per shift upward adjustment for leasing clean cabs. See Declaration of Ray A. Mundy at ¶ 22, *Metro Taxicab II District*, 633 F. Supp. 2d 83 (No. 08 Civ. 7837).

144. *Metro Taxicab II District*, 633 F. Supp. 2d at 105 (quoting *Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 541 U.S. 246, 255 (2004)).

145. *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II Circuit)*, 615 F.3d 152, 158 (2d Cir. 2010).

146. *Id.*

into whether this scheme represented a mandate or not.¹⁴⁷ *Metro Taxicab II* indicated that any voluntary incentive program is preempted based on the text of EPCA if it made a reference to fuel economy. Assigning such broad meaning to the text itself may be simpler for the court, but it bypasses the crucial question of whether such preemption is actually what Congress sought.

3. Federal Laws Offer a Counterpoint to the Metro Taxicab II Decision

The *Metro Taxicab II* decision ignored federal statutes enacted since EPCA that provide incentives for hybrid vehicles and, by their language, tend to indicate congressional intent to limit the EPCA preemption scheme. The Energy Policy Act of 1992 (EPAAct 1992) encouraged state and local governments to create plans to increase the introduction and use of hybrids and other alternative-fueled vehicles.¹⁴⁸ EPAAct 1992 explicitly contemplated both federal and state plans to promote alternative-fueled vehicles.¹⁴⁹ Under the canon of statutory construction that a specific statute trumps a more general statute,¹⁵⁰ the provisions of EPAAct 1992 indicate congressional intent that incentive programs should survive EPCA preemption, especially since EPAAct 1992 explicitly mentions nonfederal incentive programs. Furthermore, even after the *Engine Manufacturers* case, Congress has legislated in favor of hybrid automobile incentive programs. In 2009, Congress created the Car Allowance Rebate System (CARS, commonly known as the “Cash for Clunkers” program), which offered federal incentives for car owners who traded in lower-gas-mileage vehicles for more fuel-efficient ones.¹⁵¹ CARS explicitly avoided preemption of state or local incentive programs for hybrid vehicles.¹⁵² This series of actions by Congress over multiple decades suggests congressional acquiescence to—and indeed, encouragement of—state incentive programs for hybrid vehicles.¹⁵³

147. *Id.* The court found no need to reach the question of a mandate, because the incentive itself was enough to trigger statutory preemption.

148. See Petition for Writ of Certiorari, *City of New York v. Metro. Taxicab Bd. of Trade* (*Metro Taxicab II Circuit*), 2010 WL 4494142, at *21 (U.S. 2010) (citing 42 U.S.C. § 13235 (2010)).

149. *Id.* (stating that the Secretary of Energy must include in her annual report a description of programs to incentivize the introduction of alternative-fueled vehicles “whether pursuant to a State plan under this section or not”).

150. See *Morton v. Mancari*, 417 U.S. 535, 550–51 (1974).

151. Petition for Writ of Certiorari, *supra* note 148, at *23 (U.S. 2010) (citing Pub. L. 111–32, Title XIII, 123 Stat. 1909; Pub. L. 111–47, 123 Stat. 1972 (2009)).

152. *Id.*

153. Compare *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133–44 (2000) (finding that a series of congressional Acts in light of the FDA’s repeated statements that it could not regulate tobacco under the FDCA were indicative of congressional understanding of the FDCA, since “the meaning of a statute may be affected by other Acts, particularly where Congress has spoken subsequently and more specifically to the topic at hand”) with *Massachusetts v. EPA*, 549 U.S. 497, 531 (2007) (finding no “unbroken string” of congressional acts on carbon dioxide, such that EPA’s argument that it could not regulate carbon dioxide was not indicative of congressional intent under the CAA).

4. The Consequences of *Metro Taxicab II*

The Supreme Court denied certiorari in *Metro Taxicab II*, but the decision's implications may reach beyond the Second Circuit. Multiple federal courts in other circuits have already relied on the district and circuit court decisions in *Metro Taxicab II*.¹⁵⁴ Meanwhile, local incentive schemes for hybrid cabs have become almost commonplace. San Francisco's incentive scheme stands out as the most successful example. As of 2011, it was the only major city that had made substantial progress towards full hybrid conversion of its taxicab fleet, and its scheme is most like the TLC lease caps that were struck down in *Metro Taxicab II*.¹⁵⁵ Boston, Seattle, and Chicago all have less robust hybrid taxicab incentive schemes, which have had mixed success in spurring hybrid adoption, although the high price of gasoline has begun to spur more hybrid conversion nonetheless.¹⁵⁶ Many other states and cities have enacted similar programs,¹⁵⁷

154. In striking down a Boston taxicab ordinance, the court in *Ophir* found that the *Metro Taxicab II District* decision was "a case with facts strikingly similar to this one." *Ophir v. City of Boston*, 647 F. Supp. 2d 86, 90 (D. Mass. 2009). In upholding an incentive program for hybrid taxis in Seattle, the Washington district court interpreted the *Metro Taxicab II District* as ruling that "only a mandate can be a legal regulation 'related to' fuel economy standards and thus preempted by EPCA." *Green Alliance Taxi Cab Ass'n, Inc. v. King County*, 2010 WL 2643369, *5 (W.D. Wash. 2010) (emphasis added). The Second Circuit's reasoning in *Metro Taxicab II* leaves open the possibility that the exact same incentive program as in *Green Alliance*—which exclusively targets fuel economy—could now be preempted by EPCA. And the district court in *ATO v. Dallas* felt compelled to distinguish the *Metro Taxicab II* decision in upholding an ordinance allowing hybrid cabs to jump the line at Dallas–Fort Worth airport. See *infra* part IV.C.

155. San Francisco combined a twenty percent emission reduction requirement for all taxi companies with an \$8 difference in the lease caps (\$104.50 per shift for hybrids, \$96.50 for gas-fueled) and first-come, first-served \$2,000 grants for new purchases of alternative-fueled vehicles (both hybrid and compressed natural gas (CNG)). See Press Release, City and County of San Francisco, Mayor Newsom Announces that More than Half of San Francisco's Taxi Fleet Is Alternative Vehicles (March 22, 2010), <http://sfmayor.org/ftp/archive/209.126.225.7/press-room/press-releases/press-release-half-of-sf-taxi-fleet-is-alternative-vehicles/index.html>. The number of hybrid cabs rose from 201, or fourteen percent, in March 2009, to 657, or forty-five percent, just one year later. See *id.* (noting that an additional 131 cabs, or nine percent of the total fleet, run on CNG); *San Francisco's Hybrid Taxis Prove Their Worth*, L.A. TIMES, March 30, 2009, <http://articles.latimes.com/2009/mar/30/local/me-green-cabs30> (noting that fourteen percent of San Francisco's taxis were hybrids in 2009).

156. Seattle offered fifty taxicab licenses (out of 567 total licenses, or nine percent) for hybrid cabs getting forty miles per gallon (mpg) or higher; the program only survived EPCA preemption because it was a "small," "voluntary" test program. See *Green Alliance*, 2010 WL 2643369 at *5. Chicago offered an even less robust mandate, requiring any fleet of fifty or more taxicabs to include at least one hybrid. The increase in hybrids from two in June 2007 to fifty in June 2008 may be a twenty-five fold jump, but in absolute terms it represented less than one percent of the Chicago's 6,700 taxicabs. See Brittany Kaplan, *Chicago Cabbies Giving Green Rides as New Law Mandates More Hybrids*, MEDILL REPORTS, June 27, 2007, <http://news.medill.northwestern.edu/chicago/news.aspx?id=38895>. More recently, however, Chicago's fleet has converted to forty percent hybrid or compressed natural gas taxicabs. See Antony Ingram, *Electric and Hybrid Taxis Gaining in Popularity*, CHRISTIAN SCIENCE MONITOR, Dec. 20, 2012, <http://www.csmonitor.com/Business/In-Gear/2012/1220/Electric-and-hybrid-taxis-gaining-in-popularity>. Boston's incentive program merely offered an express lane at the airport (along with the federal tax credit for hybrids), and the program sought 100 hybrid cabs within 18

suggesting that *Metro Taxicab II* could lead to many local policy disruptions. Those with existing incentive schemes face the prospect of litigation that could suddenly dismantle their programs; the uncertain future of these schemes may lead to diminished participation even if they remain in place; and thousands of green taxicabs may effectively be kept off the road.

C. ATO v. Dallas: Less Preemption but No More Clarity

The Dallas–Fort Worth metro area has an air pollution problem.¹⁵⁸ Its pollution levels exceed the CAA standards and 73% of its emissions come from automobiles.¹⁵⁹ In response, Dallas enacted a city ordinance that gives front-of-the-line privileges to compressed natural gas (CNG)-fueled hybrid taxicabs picking up passengers at the Dallas–Fort Worth airport in order to promote fuel efficiency.¹⁶⁰ In denying the taxicab trade association’s suit for a preliminary injunction, the district court in *ATO* held that this incentive scheme was not a standard within the meaning of the CAA preemption clause.¹⁶¹ It distinguished *Engine Manufacturers* as a regulation relating to manufacturing or purchasing, as opposed to the “in-use” regulation in the Dallas ordinance,¹⁶² and distinguished *Metro Taxicab II* because the Dallas program was not citywide, but limited to the airport and offered perks but not penalties.¹⁶³

Upon closer inspection, however, the difference in outcomes in *ATO* and *Metro Taxicab II* can be traced to different definitions of “standards” that turn heavily on judicial discretion. The other justifications for differing outcomes quickly dissolve. First, in *ATO*, the court pointed to the economic harm to nonhybrid taxi owners in the City rule—the \$12 lease cap reduction—as distinct from the Dallas ordinance, which simply “operates as an incentive” to hybrid owners.¹⁶⁴ The court apparently meant that the Dallas ordinance conferred a

months, which would represent just five percent of the city’s 1,825 cab fleet. See Noah Bierman & Matthew P. Collette, *City Hopes Hybrid Taxis Gain Steam*, BOSTON GLOBE, March 9, 2008, available at http://www.boston.com/news/local/articles/2008/03/09/city_hopes_hybrid_taxis_gain_steam. The Boston program was a disappointment. See *id.* (after eighteen months, only thirty-two hybrids were on the road). This prompted the city to adopt a hybrid mandate, which would have converted the entire fleet by 2015, but was enjoined by a federal court. See *Ophir*, 647 F. Supp. 2d at 91 (citing *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II District)*, 633 F. Supp. 2d 83, 90 (S.D.N.Y. 2009)).

157. See Petition for Writ of Certiorari, *supra* note 148, at *25–27.

158. *Ass’n of Taxicab Operators v. City of Dallas*, 760 F. Supp. 2d 693, 695 (N.D. Tex. 2010) (finding that the Dallas–Fort Worth region has been designated a nonattainment area with respect to the EPA standards for ground-level ozone).

159. *Id.*

160. *Id.*

161. *Id.* at 699.

162. *Id.* at 697–78.

163. *Id.* at 699–700.

164. *Id.* at 700.

benefit on certain cabs but did not directly impose a cost on others.¹⁶⁵ This distinction is economically flawed and makes little intuitive sense. The incentive works in both directions: an incentive for hybrid cabs is equally a disincentive for nonhybrid cabs, since the scheme will influence the behavior of all the regulated parties.¹⁶⁶ Presumably the fleet owners in *Metro Taxicab II* did not challenge the part of the new rule that increased the lease caps for hybrids¹⁶⁷ because the increase allowed them to charge more per shift. But the *Metro Taxicab II* logic—that an overpowering incentive is effectively a mandate—should hold for increasing the lease caps for hybrid cabs just as for decreasing the lease caps for nonhybrid cabs. Indeed, in the original complaint, the plaintiffs in *ATO* declared that nonhybrid owners would *lose* an average of two to three fares per day from the airport.¹⁶⁸ Surely this is a disincentive. And so-called incentives and disincentives both influence the behavior of the same group of individuals: the taxicab owners and operators. The distinctions therefore lack substance: they allow functionally identical local schemes to be treated differently under EPCA and CAA preemption.

The second major distinction between *ATO* and *Metro Taxicab II* is the time that the standard is imposed: at the initial licensing for taxicabs in New York versus upon arrival at the airport for taxicabs in Dallas. The *ATO* court found significance in this distinction between an “in-use” regulation and a manufacturing requirement.¹⁶⁹ In other words, the effects in *ATO* may have been the same as in *Metro Taxicab II*—affecting all the taxicabs in the city with comparable incentives—but because it governed them while they were in use, the local scheme avoided preemption.¹⁷⁰ This distinction creates similar problems. Would a citywide rule granting hybrid cabs the use of all bus and high-occupancy vehicle lanes be preempted under *Metro Taxicab II* as a “direct regulation” based on fuel economy? What if the city enacted a bridge and airport toll of \$4.00 that only applied to nonhybrid taxicabs? Presumably *Metro Taxicab II* would call for preempting either hypothetical rule as a direct regulation while

165. *Id.* (“Here, taxicabs with CNG powered engines are rewarded with head-of-the-line privileges. An incentive, like the one in this case, was never challenged in *Metro. Taxicab*. Therefore, any reliance on *Metro. Taxicab* is not appropriate . . .”).

166. Notably, the *Metro Taxicab II District* court also made this distinction, referring to the decrease in nonhybrid lease caps as a “disincentive.” *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II District)*, 633 F. Supp. 2d 83, 85 (S.D.N.Y. 2009). One could argue for this distinction on the grounds that the incentive is concentrated among hybrid cabs while the disincentive is spread over all nonhybrid cabs, so in a system with a large majority of nonhybrids, the scheme would have a negligible effect on any given nonhybrid cab. A disincentive may still exist, however; this merely describes the size of the incentive. Regardless, the court never made this argument, presumably in part because the facts suggest that the disincentive was not negligible. See Complaint at 13, *Ass’n of Taxicab Operators*, 760 F. Supp. 2d 693 (No. 3-10CV-769-K) [hereinafter *Dallas Complaint*].

167. *Metro Taxicab II District*, 633 F. Supp. 2d at 85.

168. *Dallas Complaint*, *supra* note 166 at 13.

169. See *Ass’n of Taxicab Operators*, 760 F. Supp. 2d at 697.

170. See *id.*

ATO would allow either rule to stand as an in-use standard. The distinction again fails to clarify an appropriate policy approach for states and cities to avoid preemption.

The final distinction—between the definitions of “standards” in the respective cases—offers a more promising route and a more meaningful shift in preemption doctrine. It also underscores a key point: by continuing to base these decisions on an ostensibly textual analysis, courts are engaging the core policy questions without saying so and without examining them fully. The *ATO* court held that preempted standards under the CAA referred to enforceable manufacturing requirements, or purchasing requirements that accomplished the same end.¹⁷¹ In contrast, it found that the Dallas ordinance offered incentives, which “by their very nature” could not be the same as enforceable standards.¹⁷² The *Metro Taxicab II* district court, however, found precisely that a powerful incentive is a “de facto mandate,”¹⁷³ and thus a purchasing requirement. This, in turn, makes it a manufacturing requirement, and thus a standard.

The *ATO* court suggests a formal distinction based on the terminology of standards versus incentives, but extreme levels of incentives would cause this distinction to break down and make such an approach unworkable. However, if a court were to start with the premise that an incentive is not *necessarily* a standard—that the text is ambiguous on that question—it could move on to assess the degree of incentives in determining whether a program violates the CAA or EPCA. Preemption in such cases should therefore depend on whether the local scheme will hinder the policy advantages of a uniform federal standard, i.e., whether it will lead to externalized costs, as elaborated in Part VI, below.

V.

GREEN BUILDINGS AND APPLIANCE STANDARDS

Building codes have long been the province of state law, as land use regulation is among the traditional police powers reserved to the states, which often delegate the promulgation of building codes to local governments.¹⁷⁴ Meanwhile, the federal government has regulated appliance efficiency standards since the passage of EPCA in 1975.¹⁷⁵ States or municipalities seeking greater energy efficiency can hardly avoid targeting buildings, which consume roughly 40% of American electricity.¹⁷⁶ They similarly produce 40% of our greenhouse gas emissions,¹⁷⁷ or more than 2.7 billion metric tons each year.¹⁷⁸ But inside

171. *Id.* at 699.

172. *Id.*

173. *Metro Taxicab II District*, 633 F. Supp. 2d at 106.

174. Alexandra B. Klass, *State Standards for Nationwide Products Revisited: Federalism, Green Building Codes, and Appliance Efficiency Standards*, 34 HARV. ENVTL. L. REV. 335, 349 (2010).

175. Energy Policy and Conservation Act of 1975, Pub. L. No. 94-163, 89 Stat. 871 (1975).

176. BUILDINGS ENERGY DATA BOOK, *supra* note 1.

177. *See* Klass, *supra* note 174, at 336.

those buildings, appliances use most of the energy: two-thirds of the electricity consumed by U.S. households.¹⁷⁹ Thus, local governments seeking to curb electricity usage or emissions via building codes face an almost inevitable tension with federal appliance standards.

Federal appliance standards have evolved and become more sweeping in a succession of acts and amendments to EPCA. The federal scheme began as a voluntary labeling requirement and has since grown to include uniform efficiency standards for a range of products.¹⁸⁰ In addition to regulating an increasing number of appliances, in the Energy Policy Act of 1992, Congress also set a timetable for DOE to review and update the standards.¹⁸¹ It amended these timetables in the Energy Independence and Security Act of 2007 (EISA).¹⁸² Throughout, however, DOE has been largely delinquent in reviewing old standards and promulgating new ones.¹⁸³ DOE has further insisted that

178. See U.S. ENVIRONMENTAL PROTECTION AGENCY, U.S. GREENHOUSE GAS INVENTORY REPORT, available at <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html> (last accessed December 20, 2012).

179. See U.S. ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY, END-USE CONSUMPTION OF ELECTRICITY (2001), <http://www.eia.doe.gov/emeu/recs/recs2001/enduse2001/enduse2001.html>. The percentage is comparable for commercial buildings. See U.S. ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY, COMMERCIAL BUILDING END-USE CONSUMPTION SURVEY DETAILED TABLES (2003), http://www.eia.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/2003set19/2003html/e03a.html.

180. EPCA, enacted in the aftermath of the oil embargo of 1973, sought to promote energy conservation by informing consumers—with mandatory labeling of energy efficiency for appliances—and via voluntary efforts by manufacturers. See generally *Air Conditioning and Refrigeration Inst. v. Energy Res. Conservation and Dev. Comm.*, 410 F.3d 492, 498–99 (9th Cir. 2005) (citing H.R. REP. NO. 94–340, *supra* note 101, at 95). These initial testing and labeling requirements created a federal floor; states could create more stringent requirements by demonstrating a substantial state or local need. *Id.* at 499. Three years later, Congress passed the National Energy Conservation and Policy Act (NECPA), which allowed for the creation of the first minimum energy efficiency standards by DOE for certain appliances. *Id.* (citing Pub. L. No. 95–619 (1978)). In 1982, however, DOE concluded that no standards were necessary, as these minimum energy efficiency standards would not result in significant conservation. *Id.* The D.C. Circuit held that the DOE had wrongly concluded that “no standard” standards were appropriate. *Natural Res. Def. Council v. Herrington*, 768 F.2d 1355, 1433 (D.C. Cir. 1985). In light of DOE’s inaction, Congress soon enacted the National Appliance Energy Conservation Act of 1987 (NAECA), which set specific federal appliance efficiency standards for residential appliances. See *Air Conditioning and Refrigeration Inst.*, 410 F.3d at 499 (citing Pub. L. No. 100–12, codified at 42 U.S.C. §§ 6291–6309). NAECA set uniform federal standards via a floor-and-ceiling preemption scheme: states could not set stricter requirements without a waiver based on “unusual and compelling” local interests. *Id.* Congress next enacted the Energy Policy Act of 1992 to expand the appliance standards to commercial and industrial appliances. See *Air Conditioning and Refrigeration Inst.*, 410 F.3d at 500 (citing Pub. L. No. 102–486, codified at 42 U.S.C. §§ 6311–17). The Energy Policy Act of 2005 added new appliance efficiency standards, Pub. L. No. 109–58, 119 Stat. 594 (2005), as did the EISA. Pub. L. No. 110–140, 121 Stat. 1492 (2007) (codified in scattered sections of 2, 15, 42, and 46 U.S.C.).

181. Pub.L. No. 102–486, 106 Stat. 2776 (1992) (codified at 42 U.S.C. §§ 6311–17).

182. See 42 U.S.C. §§ 6295(m), 6313(a) (2006).

183. See Klass, *supra* note 174, at 349 (citing Steven Nadel et al., LEADING THE WAY: CONTINUED OPPORTUNITIES FOR NEW STATE APPLIANCE AND EQUIPMENT EFFICIENCY STANDARDS 6–9 (2006), available at <http://www.aceee.org/research-report/a062>).

ambiguous statutory language bars it from reviewing certain standards under the EISA, although the plain text and purpose of the statute could be construed otherwise.¹⁸⁴

EPCA preemption means that the federal appliance standards directly influence state and local building codes. The general EPCA preemption provision for appliance energy conservation restricts any state or local measure “concerning” the federal efficiency standards.¹⁸⁵ States can enact such a measure only in a few limited circumstances.¹⁸⁶ Most significantly, a state may create a “building code for new construction” and avoid preemption only if the code satisfies the seven-prong statutory test in § 6297(f)(3).¹⁸⁷

184. See *supra* note 180.

185. 42 U.S.C. § 6297(c) (2006). The provision states that “for any covered product, no State regulation concerning the energy efficiency, energy use, or water use of such covered product shall be effective with respect to such product . . .” *Id.*

186. Certain preexisting state regulations were carved out from the preemption provision, such as New York’s, Rhode Island’s, and Georgia’s lavatory faucet water efficiency standards. See *id.* at § 6297(c)(4)–(5)(2006). States can also seek a waiver of preemption, but must demonstrate “unusual and compelling local energy or water interests” as justification. *Id.* at § 6297(d)(1)(B). This standard is nearly impossible to meet in practice, however, and DOE has never granted a preemption waiver. Klass, *supra* note 174, at 348.

187. A regulation or other requirement . . . contained in a State or local building code for new construction concerning the energy efficiency or energy use of a covered product is not superseded by this part . . . if the code complies with all of the following requirements:

(A) The code permits a builder to meet an energy consumption or conservation objective for a building by selecting items whose combined energy efficiencies meet the objective.

(B) The code does not require that the covered product have an energy efficiency exceeding the applicable energy conservation standard established in or prescribed under section 325, except that the required efficiency may exceed such standard up to the level required by a regulation of that State for which the Secretary has issued a rule granting a waiver under subsection (d) of this section.

(C) The credit to the energy consumption or conservation objective allowed by the code for installing covered products having energy efficiencies exceeding such energy conservation standard established in or prescribed under section 325 or the efficiency level required in a State regulation referred to in subparagraph (B) is on a one-for-one equivalent energy use or equivalent cost basis.

(D) If the code uses one or more baseline building designs against which all submitted building designs are to be evaluated and such baseline building designs contain a covered product subject to an energy conservation standard established in or prescribed under section 325, the baseline building designs are based on the efficiency level for such covered product which meets but does not exceed such standard or the efficiency level required by a regulation of that State for which the Secretary has issued a rule granting a waiver under subsection (d) of this section.

(E) If the code sets forth one or more optional combinations of items which meet the energy consumption or conservation objective, for every combination which includes a covered product the efficiency of which exceeds either standard or level referred to in subparagraph (D), there also shall be at least one combination which includes such covered product the efficiency of which

Two recent building code cases, in Albuquerque and in Washington State, have tested the scope of this preemption provision and the exception. The permanent injunction of the Albuquerque code and the summary judgment in favor of Washington State for its building code demonstrate that judicial reading of the text can vary widely. It also shows that courts could better serve energy efficiency without straying from their legal mandate by acknowledging the ambiguity of the text and using a policy-oriented approach.

A. The Albuquerque Building Code and Partial Injunction

In 2007, Albuquerque formed a task force to modify the city's building regulations to reduce GHGs without unduly compromising industry flexibility.¹⁸⁸ The city ultimately adopted the Albuquerque Energy Conservation Code (the "Albuquerque Code") in 2008.¹⁸⁹ The Albuquerque Code was immediately challenged by an appliance manufacturers' trade group, which won a preliminary injunction.¹⁹⁰ In 2010, the court granted a permanent injunction in part (and only declined to enjoin the code in full for evidentiary reasons: the trade group had failed to present enough evidence to show that two of the code's green building options did not fit the exception to EPCA preemption).¹⁹¹

does not exceed such standard or level by more than 5 percent, except that at least one combination shall include such covered product the efficiency of which meets but does not exceed such standard.

(F) The energy consumption or conservation objective is specified in terms of an estimated total consumption of energy (which may be calculated from energy loss- or gain-based codes) utilizing an equivalent amount of energy (which may be specified in units of energy or its equivalent cost).

(G) The estimated energy use of any covered product permitted or required in the code, or used in calculating the objective, is determined using the applicable test procedures prescribed under section 6293 of this title, except that the State may permit the estimated energy use calculation to be adjusted to reflect the conditions of the areas where the code is being applied if such adjustment is based on the use of the applicable test procedures prescribed under section 6293 of this title or other technically accurate documented procedure.

42 U.S.C. § 6297(f)(3) (2006).

188. *Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque*, 2008 WL 5586316, at *2 (D.N.M. 2008).

189. *Id.* at *2.

190. *See generally id.*

191. *See Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque*, 835 F. Supp. 2d 1133, 1137–1140 (D.N.M. 2010). In the permanent injunction decision, the court said that the plaintiffs failed to prove that the LEED Silver or Build Green New Mexico alternatives did not fit within the exception—but this was only because the trade group did not point out the specific provisions in either voluntary program that violate the exception requirements. *Id.* at 1139. ("Plaintiffs do not set forth any facts to show that LEED Silver and Build Green New Mexico fall within the scope of the preemption statute . . . [they] do not point to the relevant provisions of LEED Silver or Build Green New Mexico. LEED Silver (Exhibit 4) is 114 pages; Build Green New Mexico (Exhibit 9) is 193 pages. The Court is not obligated to comb the record in order to make a party's arguments for the party.") LEED (Leadership in Energy and Environmental Design) is a green building certification system run by the U.S. Green Building Council. *See* U.S.

The Albuquerque Code included both “prescriptive” and “performance-based” pathways for meeting its green building standards.¹⁹² The prescriptive pathway required the use of certain appliances that exceeded federal standards, which the court found to be preempted with a cursory analysis.¹⁹³ The court rejected the manufacturers’ argument that the prescriptive pathway could survive if it were merely one of several alternate pathways to achieve the energy conservation goal and as long as not all of those alternatives would be preempted if they were standalone standards.¹⁹⁴

The court took a broad view of EPCA preemption in this context, particularly with respect to new construction requirements. The Albuquerque Code contained various performance-based options, which required a certain level of energy conservation without prescribing the precise steps to achieve it.¹⁹⁵ The court found that all of these performance-based alternatives “directly or indirectly” concerned energy efficiency for covered appliances.¹⁹⁶ The requirements meant that a builder using an appliance that complied with federal standards would have to spend additional resources in other areas of construction in order to comply with the energy conservation requirements of the building code, which the court considered a penalty for using federally approved appliances.¹⁹⁷ Thus the Albuquerque Code provisions “concerned” covered appliances and would be preempted unless the appliances fit one of the statutory exceptions.¹⁹⁸

Green Bldg. Council, *LEED*, <http://www.usgbc.org/leed> (last visited July 19, 2013). Similarly, the court found insufficient evidence to determine the permissibility of Section 405, which required a 30% improvement on ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) standards. *Id.* at 1138. ASHRAE is a private organization that sets industry standards. In the preliminary injunction decision, the court found it “unclear” whether the 30% increase over the ASHRAE baseline in Section 405 would require products that exceeded federal efficiency standards. *Air Conditioning, Heating & Refrigeration Inst.*, 2008 WL 5586316, at *10. The court enjoined only the Section 404 option, which referred to a model design for new construction that included covered products with higher efficiency than the federal standards. *Air Conditioning, Heating & Refrigeration Inst.*, 2010 U.S. Dist. Lexis 141814, at 1139 (citing 42 U.S.C. § 6297(f)(3)(D) (2006)).

192. *Air Conditioning, Heating & Refrigeration Inst.*, 835 F. Supp.2d at 1135.

193. *See id.*, at 1137, 1138.

194. *Id.*, at 1137.

195. One option was to make buildings 30% more energy efficient than a “baseline building” as described by the ASHRAE standards. *Air Conditioning, Heating & Refrigeration Inst.*, 2008 WL 5586316, at *2 (for Volume I) and *3 (for Volume II). A second option was to meet LEED Silver certification levels. *Id.* For detached one and two-family homes, the code offered two other options: compliance with a state-created voluntary standard similar to LEED (Build Green New Mexico) or compliance with a model design that requires certain appliances that exceed federal efficiency standards (Section 404 in the code). *Id.*, at *3.

196. *Id.* at *8.

197. *Id.* at *9. (“Thus, in effect, there is a penalty imposed for selecting products that meet, but do not exceed, federal energy standards.”).

198. *See id.*

The *ACHRI* court's contention that each alternative must not violate EPCA preemption and is subject to its own preemption analysis¹⁹⁹ is problematic because it takes a broad notion of when a building code "requires" a higher-efficiency appliance and extends that notion even further. This may block builders from choosing optimal options: if the code creates one nonappliance pathway to better efficiency, but the builder could get the same efficiency more cheaply by using better appliances, shouldn't the builder be allowed to do so?²⁰⁰ And presumably, an appliance will be relatively inexpensive because it is readily available on the market. The court is clearly concerned with the risk that local governments may enact excessive efficiency requirements for nonpreempted components of construction, knowing that an alternative pathway using higher-efficiency appliances will become a de facto requirement.²⁰¹ But using preemption doctrine to block circumvention via prescriptive pathways is likely to prevent builders from choosing an optimal (cheaper, but equally energy-conserving) alternative in some cases.²⁰²

The new construction exception to EPCA preemption includes an inquiry into whether the building code uses optional combinations of covered products. The doctrine depends on whether the products exceed the federal efficiency standards, and yet it allows such combinations if they are balanced out by other options that do not use higher-efficiency products.²⁰³ This provision anticipates that building codes will require energy savings, which necessarily leads to additional construction costs. In other words, the statute says a building code can require energy savings via appliances, within limits. Yet the court's definition of "require" would seemingly read that prong out of the exception by treating any provision that imposes additional costs as a penalty for not using more efficient appliances.²⁰⁴ The decision also ignored other textual indications that Congress did not intend to impose such strict controls, described in Part VI, below.

199. See *Air Conditioning, Heating & Refrigeration Inst.*, 835 F. Supp.2d at 1137 (citing *Air Conditioning, Heating & Refrigeration Inst.*, 2008 WL 5586316, at *8) ("[T]he Court can find no support for the novel proposition that the inclusion of one or more alternatives for compliance in a regulation keeps each of the alternatives from being considered a regulation.").

200. More precisely, if one compliance pathway in a building code survived EPCA preemption—by requiring better insulation for the building envelope, for instance—then it is unclear why offering an alternative pathway that includes higher efficiency appliances is problematic. This alternative pathway simply allows greater behavioral efficiency, in addition to energy efficiency: the builder will only use more efficient appliances if it is a cheaper way to achieve the lawful requirement in the code to reduce energy usage.

201. See *Air Conditioning, Heating & Refrigeration Inst.*, 2008 WL 5586316, at *8–*10.

202. For instance, if the state required better insulation in order to save energy, a builder may find that installing higher-efficiency appliances would achieve the same energy savings at a lower expense. If given the choice between them, the builder would install the appliances rather than upgrade the insulation. But if the builder is foreclosed from the appliance-based approach, as the *Air Conditioning, Heating & Refrigeration Inst.* court insisted, then the result is inefficiency: builders must use a more expensive pathway to achieve the same result.

203. 42 U.S.C. § 6297(f)(3)(E) (2006).

204. See *Air Conditioning, Heating & Refrigeration Inst.*, 2008 WL 5586316, at *9.

B. The Washington Building Code and Denial of Injunction

Washington's 2006 Building Energy Code applied only to new construction.²⁰⁵ Builders could comply with its energy conservation goals via two performance-based or one prescriptive pathway for construction.²⁰⁶ None of the requirements in the 2006 code exceeded EPCA standards.²⁰⁷ Under state law, the Washington State Building Code Council must review the building code every three years and has the power to amend it.²⁰⁸ The code must continually move towards a 70% reduction in energy consumption from the baseline level set in 2006 by 2031.²⁰⁹ Thus, in 2009, the Council reviewed the state code and added Chapter 9 to require a 15% reduction in energy use from the 2006 levels for all new construction, retaining the three compliance pathways from the 2006 code.²¹⁰

The *BLAW* court assumed that all three pathways concerned appliance efficiency directly,²¹¹ tailoring its analysis to whether the code fit within the preemption exception for new construction in § 6297(f)(3) and focusing on the three most contentious prongs: B, C, and E.²¹² It offered greater deference to the state and used a more formal reading of the statute than the *ACHRI* court did. Prong (B) only applies if the code "does not require" higher appliance efficiency than the federal standard, which the court read literally, saying that only if the code offered no alternative except higher appliance efficiency would it be preempted under this subsection.²¹³

Prong (C) requires that energy conservation credits be allocated on a one-to-one "equivalent energy use or equivalent cost basis."²¹⁴ The *BLAW* court held that merely showing a deviation from identical energy levels was insufficient to violate this requirement; rather, it required a variation in energy levels "so great"

205. *Bldg. Indus. Ass'n of Wash. v. Wash. State Bldg. Code Council*, 2011 WL 485895, at *3 (W.D. Wash. 2011).

206. *Bldg. Indus. Ass'n of Wash.*, 2011 WL 485895, at *2.

207. *Id.* at *3.

208. *Id.* at *2.

209. *Id.* at *2.

210. *Id.* at *4.

211. In finding that the pathways all fit the new construction exception, the court had no need to decide whether the pathways would be preempted otherwise. The closest question appears to be the system performance pathway, which allows tradeoffs in efficiency among all the elements of construction, *see id.* at *3, without directly addressing appliance efficiency. Given the contribution of appliances to overall building energy use, *see supra* note 1, however, a systemic analysis appears to "concern" appliance standards within the plain language of the statute.

212. The primary issues in the case were whether the Washington code fit the restrictions in 42 U.S.C. §§ 6297(f)(3)(B), (C), (E) (2006). The court also addressed the challenge to 42 U.S.C. § 6297(f)(3)(F), but referred back to its analysis of subsection (f)(3)(C) in granting summary judgment for the state.

213. *Bldg. Indus. Ass'n of Wash.*, 2011 WL 485895, at *9 ("the Code can not [sic] require that covered products have an energy efficiency exceeding federal energy conservation standards as the only means to comply with the code") (emphasis added).

214. 42 U.S.C. § 6297(f)(3)(C) (2006).

that it could not be tolerated.²¹⁵ The decision turned largely on the relative credibility of the parties' experts: the state's scientific reasoning and methodology carried more weight than the opinion of a long-time contractor, whose testimony the court rejected.²¹⁶ In a fairly straightforward statutory interpretation, the court then rejected the necessity of showing that the code's options were also on an equivalent cost basis: the word "or" meant that either equivalent energy or equivalent cost would suffice.²¹⁷

Finally, prong (E) demands that a code, if it includes options that require exceeding federal appliance standards, must include at least an equal number of options that do not require exceeding the federal standards.²¹⁸ The court refused to require equivalent costs between each of the options, since it found no such language in EPCA, nor would it allow for a "functional" violation of the preemption provision.²¹⁹ Yet a code author could comply with this test and still effectively require higher-efficiency appliances by including several expensive options that do not exceed the federal standards. This could allow some undesirable circumvention in practice. A legal standard that acknowledges the relative costs—and thus the incentives—of the code options would likely prevent such circumvention.

VI.

A BETTER APPROACH TO PREEMPTION FOR ENERGY EFFICIENCY CASES

By reading the statutory text of the CAA and EPCA more narrowly, and focusing on externalities to determine whether a local energy efficiency scheme leads to a loss of the benefits of uniformity, courts can better manage preemption and fulfill the mandates of both statutes.

A. Limiting CAA and EPCA Preemption for More Fuel-Efficient Taxicabs

A more sensible preemption doctrine for both the CAA and EPCA in the green taxicab context would focus first on whether a scheme sets an actual standard for fuel economy or emissions, then on whether it will externalize costs; if neither of those is met, the scheme would be allowed to survive the preemption inquiry.

215. *Bldg. Indus. Ass'n of Wash.*, 2011 WL 485895, at *12.

216. The plaintiffs did not prove that their expert was "qualified to render opinions in energy efficiency modeling." *Id.*

217. *Id.* at *12–*13.

218. *See id.* at *13.

219. *Id.* at *14 ("The text of the exemption provision does not include the terms 'functionally' or 'effectively' require. Plaintiffs point to a portion of the Congressional record which provides that 'performance-based codes cannot expressly or effectively require the installation of covered products.' Plaintiffs allegations, without more, are insufficient to show that the Code 'functionally' or 'effectively' requires use of products that exceed federal efficiency standards. EPCA does not require that the various options provided in the state codes be financially cost equivalent to the builder.").

1. The Textual Step: Defining “Standards” More Narrowly

The first step to reforming this area of preemption is to read the statutory term “standards” more narrowly. The current preemption doctrine rests almost entirely on an evolving judicial definition of this word, one that is increasingly divorced from the ultimate purposes of Congress in enacting the CAA and EPCA. To read “standards” that “relate to” emissions or fuel economy as any program that uses those factors as criteria, as *Engine Manufacturers* does and *Metro Taxicab II* implies, gives the preemption scheme a remarkably broad scope that invalidates or threatens policy programs that Congress has indicated it supports.²²⁰ Unfortunately, the *Metro Taxicab II* district court offered little clarity in holding the lease cap incentive scheme to be a “de facto mandate,” since it gave no indication of when incentive schemes are *not* mandates, and *ATO* similarly did not indicate when (or even if) an incentive scheme could *be* a mandate. Thus the preemption jurisprudence appears to rise or fall based on whether a given court decides that a scheme fits its (often undefined) definition of “mandate” or “standard,” without explaining just where that line is drawn, or why. This gives local policymakers little idea of how to construct an incentive program in the future and unnecessarily threatens salutary policies in the meantime.

The courts could better manage preemption by relying on the natural definition of “standards”—literally a purchasing or manufacturing requirement²²¹—and concluding that the term, as applied to local incentive schemes, is ambiguous at best.²²² In the absence of clear text, the courts, under my proposal, would look at the real-world consequences of the local scheme to determine whether preemption is appropriate. If the scheme in question does not lead to cost externalization, the presumption against preemption prevails and the scheme survives. The fleet rules that governed the behavior of private actors in *Engine Manufacturers* would be a mandate and thus preempted under this approach.²²³ But the schemes in *Metro Taxicab II* and *ATO* would require a closer inspection.

2. The Institutional Step: Whether the Agency Has Addressed Preemption in This Context

When the statutory text is unclear, a sensible starting point would be to look at whether the regulators themselves have asserted a proper scope of preemption;

220. See *supra* notes 180–85 and accompanying text.

221. See, e.g., MERRIAM-WEBSTER ONLINE DICTIONARY, “Standard,” <http://www.merriam-webster.com/dictionary/standard> (“4. something set up and established by authority as a rule for the measure of quantity, weight, extent, value, or quality”).

222. See *supra* note 149.

223. See Michael Burger, “It’s Not Easy Being Green”: Local Initiatives, Preemption Problems, and the Participant Market Exception, 78 U. CIN. L. REV. 835, 862 (2010) (noting that the market participant exception could still save the scheme from preemption).

Sharkey and Merrill describe this as an institutional approach.²²⁴ The Solicitor General filed an amicus brief in *Engine Manufacturers*, arguing for preemption in that case.²²⁵ Neither EPA nor NHTSA has weighed in on the hybrid taxicab cases, which have not reached the Supreme Court, making an institutional reference approach less useful in the present context.²²⁶ Furthermore, the most recent NHTSA rule on fuel economy explicitly did not address the question of preemption, stating that it was unnecessary to address at this time because a national standard would apply.²²⁷ Again, this provides little insight. While I agree with Sharkey and Merrill to the extent their approach may be applicable, it does not appear to help in this instance. The best institutional reference in this case, in fact, is Congress itself. Congress has recently enacted several incentive programs for fuel-efficient vehicles, and while this does not amount to a definitive statement, it suggests that incentive programs should not be uniformly foreclosed.²²⁸ The court should therefore look to cost externalization to make a sensible preemption decision.

3. The Policy Step: Whether the Scheme Will Lead to Externalized Costs

Green taxi schemes generally, and the *Metro Taxicab II* and *ATO* cases in particular, are unlikely to create negative externalities. The required vehicles are readily available on the commercial market,²²⁹ which suggests that economies of scale in manufacturing will not be disrupted by a local incentive program. *Engine Manufacturers* claimed otherwise, however, noting that if every state or political subdivision enacted such a rule then it would disrupt the uniform federal scheme.²³⁰ But that scheme required individual purchases; the incentive programs in *Metro Taxicab II* and *ATO* involve no such mandate. The *Metro Taxicab II* district court admitted that any effect of the City rule on EPCA's objectives would be "minor," but did not attempt to quantify it and instead cited *Engine Manufacturers* in finding such an effect foreclosed.²³¹ This should not suffice. It is possible that the City rule would have no discernible effect on EPCA objectives; by reciting the Supreme Court's "if every state did it" formula, a court draws a bright line that, while easily managed, will almost certainly lead

224. See Merrill, *supra* note 89 and accompanying text; Sharkey, *Inside Agency Preemption*, *supra* note 90 and accompanying text.

225. Brief of United States as Amicus Curiae Supporting Reversal, *Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 541 U.S. 246 (2003) (No. 02-1343).

226. Cf. Merrill, *supra* note 89 and accompanying text.

227. 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards Final Rule, 77 Fed. Reg. 62,624, 63,147 (Oct. 15, 2012).

228. See *supra* notes 100-103 and accompanying text.

229. See *Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 541 U.S. 246, 263 (2004) (Souter, J., dissenting).

230. *Id.* at 255 (majority opinion).

231. *Metro. Taxicab Bd. of Trade v. City of New York (Metro Taxicab II District)*, 633 F. Supp. 2d 83, 103 (S.D.N.Y. 2009).

to worse policymaking overall. The cost-externalization concern regarding economies of scale should require showing that the local incentive itself will affect manufacturing costs in some discernible way.

Furthermore, in a green taxi scheme, any additional compliance costs will likely be passed through to the purchaser, not internalized by manufacturers, since the demand for taxicab vehicles is likely to be fairly inelastic.²³² Indeed, the local schemes seem to be factoring in costs and attempting to correct market failures in order to get market participants to internalize costs: taxicab fleet owners in New York City made purchasing decisions but externalized one cost of those decisions (gas consumption) to the taxicab drivers,²³³ and taxicabs in Dallas externalized the effects of their emissions, which contributed both to statutory violations (CAA nonattainment) and public health risks (air pollution).²³⁴ If the localities will absorb the added costs—and the cases find no evidence that they will not—then the schemes should not create externalities. The district court in *Metro Taxicab II* properly looked into whether the local scheme was based on evidence of actual costs and benefits, rather than speculation, although it refused to accept the TLC rationale upon doing so.²³⁵ The *ATO* court failed to inquire into the costs and benefits because it did not reach the question,²³⁶ but it should have done so. In short, courts should ask if the local policymakers accounted for compliance costs or if those costs could be passed through to the local purchasers. If so, the cost-externalization factor is minimized.

The *Engine Manufacturers*, *Metro Taxicab II*, and *ATO* decisions rely on strained and varied definitions of the term “standards” in the relevant statutes to create expansive, bright-line judicial rules on preemption, despite evidence of congressional intent to the contrary and case law evidence that the text is ambiguous in this context. Preemption law after *Engine Manufacturers* and *Metro Taxicab II* will impede policies that can achieve greater economic efficiency (or at least would allow states to adopt their preferred levels of fuel efficiency in these contexts without imposing costs on the national economy). A wiser preemption approach, which serves economic efficiency as well as the ultimate purposes of the CAA and EPCA, would not rely on arbitrary and overbroad statutory interpretations and would instead allow local policies to stand if they do not create negative externalities that will be borne by out-of-state actors.

232. See Bruce Schaller, *Elasticities for Taxicab Fares and Service Availability*, 26 TRANSPORT. 283 (1999), available at <http://www.schallerconsult.com/taxi/elastic.pdf>.

233. See *supra* notes 168–75 and accompanying text.

234. See *supra* notes 190–91 and accompanying text.

235. See *Metro Taxicab II District*, 633 F. Supp. 2d at 99.

236. See *Ass’n of Taxicab Operators v. City of Dallas*, 760 F. Supp. 2d 693, 699 (N.D. Tex. 2010).

B. Limiting EPCA Preemption for Green Building Codes

Courts can and should craft a sensible policy that comports with EPCA by granting greater deference to state and local building codes while ensuring that they are not simply an end-run around federal appliance standards. This would allow states to push for higher energy efficiency in buildings, the sector that consumes the largest portion of our energy.

1. Circumvention

Preemption of building codes for new construction may at first seem more complex than for automobile standards, since the inquiry includes circumvention. Not only must a court ask whether a local regulation is a “standard,” but also whether a regulation of buildings is effectively a regulation of appliances. Yet the complexity is less problematic than it first appears. The exception for new building codes in the statute indicates congressional intent to give subnational governments some leeway in creating green building codes.²³⁷ One prong of the exception explicitly allows for local building codes to have options that require higher efficiency appliances, as long as the code contains at least an equal number of options that do not require exceeding the standard for covered appliances.²³⁸ Clearly, if the energy savings will not come from the covered appliances, they will have to come from elsewhere and will incur some cost. The *ACHRI* preliminary injunction would have read this prong out of the exception provision.²³⁹ Furthermore, as the *BIAW* court noted, the exception explicitly provides for scenarios in which a code could include alternative options involving appliances that exceed the federal efficiency standards by up to five percent.²⁴⁰ This turns the question of circumvention into one of degree. The preemption inquiry must therefore acknowledge that the text allows for some minimal circumvention and should focus instead on its allowable scope.

To be clear, ambiguity appears in two places within this EPCA provision: first, for new or existing construction, whether a requirement for overall building energy efficiency concerns appliance standards; and second, for new construction, whether a requirement that includes appliance efficiency standards and other building efficiency standards (as a package) is too stringent. The Albuquerque case involved both; the Washington case involved only the latter. I have focused primarily on new construction although each one implicates similar concerns about circumvention of the federal standards. For either type of ambiguity, courts reviewing a preemption challenge should not try to shoehorn this mix of requirements into a simple textual analysis. Rather, to determine

237. The “institutional reference” approach is little help in this case, see *supra* text accompanying note 90, since federal agencies do not issue building code requirements.

238. 42 U.S.C. § 6297(f)(3)(E) (2006).

239. See *supra* note 203 and accompanying text.

240. See *Bldg. Indus. Ass’n of Wash. v. Wash. State Bldg. Code Council*, 2011 WL 485895, at *13 (W.D. Wash. 2011).

whether a building code's nonappliance requirements are effectively appliance standards—assuming the local scheme otherwise follows the letter of the statute—a sensible judicial inquiry will acknowledge the ambiguity and then focus on the existence or absence of cost externalization to arrive at a sensible preemption ruling.

2. *Inquiring into Cost-Externalization Can Address the Circumvention Concern Under EPCA*

Circumvention is most problematic if the requirements for nonappliance elements of the building construction impose external costs by eliminating some economies of scale, which will most often be indicated by whether the required components are widely commercially available. A second indicator is the sheer size of the affected market. The *ACHRI* court did not bother to ask these questions, which resulted in overly broad preemption.²⁴¹ The *BLAW* court also did not directly address these questions, resulting in what may have been overly narrow preemption.²⁴² In both cases, the building codes at issue contained at least some “prescriptive” pathways with a menu of options for efficiency gains. Assessing the commercial availability of each option would give an indication of whether the code is likely to lead to unwanted externalities. A statewide building code could affect economies of scale in manufacturing (depending in part on the size of the state and the amount of new construction taking place there) that would hurt economic efficiency in the industry.²⁴³ It could also push industries to retain their economies of scale but adopt a higher industry-wide standard,²⁴⁴ depending on the specific facts of the case. While it may seem perverse that a larger city or state would draw wider preemption, this comports with good policymaking, since the larger markets could more easily disrupt economies of scale by enacting stricter energy efficiency standards. As just one example, while the large menu of options in the Washington building code makes it unlikely to dramatically alter economies of scale in the air ventilation industry—air ventilation being one of the menu items in the code²⁴⁵—the court could have been more confident in its assessment by investigating the prevalence of the prescribed air ventilation options in the market.

The related externality concern of whether manufacturers could pass through the elevated compliance costs appears inconclusive: while construction costs are fairly elastic across geographic areas,²⁴⁶ how these differential costs are incorporated into building prices is, as one researcher put it, “an understudied

241. See *supra* part V.A.

242. See *supra* part V.B.

243. See *supra* part III.A.2.

244. See *id.*

245. See *Bldg. Indus. Ass'n of Wash.*, 2011 WL 485895 at *4.

246. See Joseph Gyourko and Albert Saiz, *Construction Costs and the Supply of Housing Structure*, 46 J. REGIONAL SCI. 661 (2006).

empirical issue.”²⁴⁷ But since the relative stringency of local regulations affects construction costs less than other factors like unionization and topography,²⁴⁸ compliance costs of a local green building scheme may create few, if any, externalities.

To be sure, this is a difficult inquiry. A building code with multiple compliance pathways, multiple options within the “prescriptive” pathways, and at times multiple options in a single subsection of that pathway (e.g. “efficient building envelope 1,” “efficient building envelope 2,” and “super-efficient building envelope 3” in the Washington code²⁴⁹) is a complex scheme, and its effect on any given industry could be difficult to predict. But looking at the different options with an eye towards cost externalization is preferable to the approaches used by courts thus far, in that it seeks to answer the appropriate questions about how preemption should work for new construction and what Congress likely intended in this convoluted scheme.

This is preferable to the *ACHRI* approach, which declared that any alternative options involving appliances that exceeded the federal efficiency standard were preempted. *ACHRI* prevents the state from giving builders any flexibility to achieve energy conservation at lowest cost.²⁵⁰ A good energy conservation policy could require changes to building envelopes or other components; the *ACHRI* decision locks in those options, rather than allowing builders to choose to upgrade appliances instead. This approach is also preferable to the *BIAW* test, particularly with regard to prong (E) of the new construction exception. Rather than simply count the number of options that do or do not exceed federal standards, it would offer a straightforward but substantive question to ask about each option—whether it is widely available or can easily be made so—before presuming its legitimacy.

By relying on the cost-externalization inquiry to ensure that state and local building codes are not de facto appliance efficiency standards, courts can allow localities to promote greener buildings while still complying with the requirements of EPCA. The stakes are high. The building sector is responsible for more than two billion tons of greenhouse gas emissions in the U.S. each year, so allowing states to push for less energy-intensive designs, where appropriate, may have a big impact.

VII.

CONCLUSION: TOWARDS A COMMON APPROACH

Green building codes and taxicab regulations can both be used by municipalities to achieve energy conservation goals without infringing on the federal government’s prerogative to set uniform standards for nationwide

247. *Id.* at 677.

248. *Id.* at 676.

249. *Bldg. Indus. Ass’n of Wash.*, 2011 WL 485895, at *4.

250. *See supra* note 201 and accompanying text.

products. Both generally involve broad local regulation, only a portion of which affects a federally regulated product. Both offer the potential for substantial gains in efficiency by sophisticated market actors who should be incentivized to achieve those gains at lowest cost. While municipalities may still seek to circumvent federal preemption of fuel efficiency and appliance efficiency by regulating broadly in these areas, the regulations will affect interested parties with strong local constituencies—and these groups may bring legal challenges and exercise political power to oppose overly burdensome regulation.²⁵¹ Thus courts can exercise some necessary review for preemption purposes under EPCA without creating overbroad judicial rules that inhibit economic efficiency. Nuance in this area should be possible and preferable.

The judicial decisions in this area have tended towards bright line rules, following the Supreme Court's lead—no doubt because courts may be uneasy with eschewing the bright lines and wielding substantial discretion. Yet courts already vary under the current approach; while they claim to be interpreting the text of an unambiguous statute, the case law belies this claim. If the doctrine will be based (to some degree) on judicial discretion, it should favor better policy. A general approach to efficiency and preemption should focus on whether the local scheme will lead to externalized costs on other states or on industry—or allow better internalization of costs by the locality in the instances of market failures. If the local scheme avoids violating the clear statutory text, read appropriately narrowly, and policy concerns related to uniformity do not arise, then courts should let the local scheme stand in the interest of creating optimal nationwide energy efficiency policy.

251. See Hills, *Against Preemption*, *supra* note 66, at 1.