

A FLY IN THE OINTMENT: WHY FEDERAL PREEMPTION DOCTRINE AND 42 U.S.C. § 7431 DO NOT PRECLUDE LOCAL LAND USE REGULATIONS RELATED TO GLOBAL WARMING

I. INTRODUCTION

Global warming. Climate change. Greenhouse gas (“GHG”) emissions.¹ Polar ice cap melt. Sea level change. Regardless of how it is described, global climate change is a compelling issue with numerous responses from federal, state, local, and private entities.² This Note discusses the intersection between global climate change and local land use policies, such as local zoning and planning ordinances, developed by local governments in response to this global issue. Land use decision-making in the United States is a quintessential function of local government, usually under the delegation of the police power by the controlling state.³ Responses to global climate change at the local level, by definition, however, involve global issues and thus raise potential conflicts between federal powers to regulate national and international (global) issues and state police powers as exercised by local governments on local issues. Global climate change challenges this traditional division of powers because local governments are affected by global climate change and, perhaps uniquely, are simultaneously affecting global climate change through cumulative local policy decisions.

State and local governments are leading in developing programs to limit GHG emissions. Programs can include state-level policies on GHG emissions, local ordinances that mandate the use of “green” products in city departments,⁴ and local land use policies intended to address GHG

¹ Greenhouse gases include carbon dioxide, methane, and nitrous oxide. U.S. ENERGY INFO. ADMIN., EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES 2008 1 (2009), available at <http://www.eia.doe.gov/oiaf/1605/ggrpt/>.

² The Obama Administration is specifically addressing GHGs and, for example, is calling for a 28% reduction in GHGs by 2020. *Energy & Environment*, THE WHITE HOUSE, http://www.whitehouse.gov/agenda/energy_and_environment/ (last visited Nov. 7, 2010). The Administration also has an Office of Energy and Climate Change Policy to address climate policy. *Executive Office of the President*, THE WHITE HOUSE, <http://www.whitehouse.gov/administration/eop/> (last visited Nov. 7, 2010).

³ The delegation of the state police power to local municipal corporations, thus creating a derivative power in the local governments, is termed “Dillon’s Rule.” BLACK’S LAW DICTIONARY 523 (9th ed. 2009) (citing 1 JOHN F. DILLON, COMMENTARIES ON THE LAW OF MUNICIPAL CORPORATIONS § 89, at 115–16 (3d ed. 1881)); see also *City of Clinton v. Cedar Rapids & Mo. River R.R.*, 24 Iowa 455, 475 (1868) (“Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist.”).

⁴ *E.g.*, Racquel Palmese, *Buying Green: Cities and Counties Find Their Way*, GREEN TECH. MAGAZINE, http://www.greentechnology.org/green_technology_

emissions. As a recent article summarizes, however, legal challenges to these programs are emerging: from industry groups opposing locally mandated energy-efficiency requirements that increase energy efficiency, to individuals suing over failed green building certifications, to opposition to zoning variances intended to limit local GHG emissions.⁵

This Note argues that the Federal Clean Air Act (“CAA”),⁶ currently the presumptive means of regulating GHGs,⁷ does not necessarily preempt local land use policies that local governments justify as reducing or mitigating GHGs in an effort to limit the effects of global warming. Somewhat ironically, it is precisely because the federal government has elected to use the CAA regulatory structure rather than an issue-specific structure that the preemptive power of the CAA as related to local land use is limited. Specifically, the CAA in 42 U.S.C. § 7431 (2006) apparently limits its own application to certain local land use decisions. The discussion in this Note is purposefully narrowed to local land use decisions involving zoning, planning, and subdivision policy—traditional functions of local governments.⁸

Under the current statutory and regulatory structures, not only is there a compelling issue of federalism supporting local land use decision-making regarding GHG emissions, but Congress has already spoken on the issue of preemption related to air pollutants by limiting the application of the CAA in the context of local land use decisions.⁹ Thus, because the CAA appears to be the presumptive means for regulating GHGs,¹⁰ the CAA statutory structure itself necessarily restricts the CAA from preempting local land use decision-making—both directly (by statute) and indirectly (by recognizing a fundamental tenant of

magazine/buyingg.htm (last visited Nov. 7, 2010) (recounting the California experience with purchasing “green” items that have a reduced adverse effect on human health and the environment for municipal facilities).

⁵ Wendy N. Davis, *Green Grow the Lawsuits: Real Estate Industry Braces for Green-Inspired Litigation*, A.B.A. J., Feb. 2009, at 20–21.

⁶ 42 U.S.C. §§ 7401–71 (2006).

⁷ See *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007) (holding the EPA may regulate CO₂, a GHG, as an air pollutant under the CAA). Note that federal climate legislation is not new. The federal National Climate Program, enacted in 1978, provides federal research and monitoring assistance on climate issues but is not a regulatory structure. See 15 U.S.C. §§ 2901–02, 2904 (2006).

⁸ A related area involving local law not discussed here, beyond distinguishing the issues at stake, is local ordinances that require energy efficiency standards, local green-building methods, and related standards as applied to construction. See, e.g., Michael Wilmeth, *Albuquerque Lawsuit Threatens Green Building Codes*, BUILDINGGREEN.COM (Dec. 1, 2008), <http://www.buildinggreen.com/auth/article.cfm/ID/4081/> (summarizing a case challenging new green building codes in Albuquerque, New Mexico).

⁹ 42 U.S.C. § 7431 (2006).

¹⁰ See 549 U.S. at 532 (holding the EPA may regulate CO₂, a GHG, as an air pollutant under the CAA).

federalism holding that land use decision-making is primarily a state or local government function).

This Note analyzes the issue of climate change and global warming theory as background material in Section II. Section III describes the long-settled doctrine that local authorities are best situated to make land use decisions. Section IV analyzes the emerging research linking land use decision-making and greenhouse gas emissions mitigation. Section V analyzes recent issues arising from *Massachusetts v. EPA*.¹¹ Finally, in Sections VI and VII, the intersection between the local land use powers and potential CAA preemption are analyzed with particular emphasis on a little-mentioned provision of the CAA that apparently limits the application of the CAA to land use decision-making.¹²

II. GLOBAL WARMING OVERVIEW

In simple terms, global warming theory posits that human actions and human-related actions that release GHGs contribute to climate change. Such change is evident by increases in average global temperatures, termed “global warming.”¹³ Increased emissions of GHGs from human activity ascend into the earth’s atmosphere and trap heat there; that trapped heat leads to higher overall global temperatures.¹⁴ Among the GHGs are carbon dioxide (“CO₂”), methane (“CH₄”), nitrous oxide (“N₂O”), and various hydrofluorocarbons.¹⁵ Commonly cited human sources of GHGs include emissions from the burning of fossil fuels for transportation, electricity generation, industrial activity, residential heating, and commercial heating;¹⁶ methane emissions from agricultural

¹¹ *Id.* at 505 (recent U.S. Supreme Court decision related to GHG regulation).

¹² 42 U.S.C. § 7431 (the “land use authority” limitation).

¹³ EPA, FREQUENTLY ASKED QUESTIONS ABOUT GLOBAL WARMING AND CLIMATE CHANGE: BACK TO BASICS 2–4 (Apr. 2009), available at http://www.epa.gov/climatechange/downloads/Climate_Basics.pdf. Global warming theory, of course, is not without controversy. Compare *Global Warming: Consensus vs. Certainty*, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/global_warming/science_and_impacts/science/global-warming-consensus-vs.html (last updated June 9, 2003) (positing global warming has scientific consensus), with *Key Issues*, SEPP.ORG, <http://www.sepp.org/key%20issues/keyissue.html> (last updated July 2006) (positing that climate models are inaccurate and that climate change has become a global political issue rather than a scientific issue).

¹⁴ EPA, *supra* note 13, at 2–3. See generally AN INCONVENIENT TRUTH (Paramount Pictures 2006) (summarizing global warming theory); THE GREAT WARMING (Stonehaven Productions 2006) (summarizing climate change effects on communities).

¹⁵ U.S. ENERGY INFO. ADMIN., *supra* note 1, at 1.

¹⁶ EPA, *supra* note 13, at 3; see, e.g., *In re Otter Tail Power Co. ex rel. Big Stone II*, 744 N.W.2d 594, 599–600 (S.D. 2008) (challenging the building of a new power plant on greenhouse gas emissions grounds); Michael B. Gerrard, *Introduction and Overview to GLOBAL CLIMATE CHANGE AND U.S. LAW* 7–10 (Michael B. Gerrard ed., 2007) (noting sources of GHGs).

production such as feedlots and the burning of crop residue;¹⁷ emissions from waste management activities, including landfills and waste-water treatment facilities;¹⁸ and the release of hydrofluorocarbons used in refrigeration, air conditioning, and manufacturing processes.¹⁹ Thus, the theory of global warming argues that human actions are contributing materially to global climate change.²⁰

Studies indicate that global warming may have a significant effect on human health and communities. This includes significant adverse human health effects such as the spread of new diseases, death from catastrophic weather events, and health problems arising from extreme heat waves.²¹ While scientists had already predicted such effects, the EPA published a new finding on December 7, 2009 under the authority of Section 202(a) of the CAA, formally stating that global warming threatens the “public health and welfare.”²² The publication is a precursor to regulating CO₂ as a criterion pollutant under the CAA and providing formal federal recognition of the threats.²³ Additionally, global warming may also result in property damage and adverse effects on

¹⁷ U.S. ENERGY INFO. ADMIN., *supra* note 1, at 6.

¹⁸ *Id.*

¹⁹ *Id.* at 4.

²⁰ Global warming is a developing theory—albeit with significant support and consensus in the scientific community. As of this writing, however, new information indicates that the most definitive report on global warming issues to date, from the 2007 International Panel on Climate Change (IPCC), may already be outdated as subsequent analysis indicates rising GHG emissions in excess of earlier projections. *Compare* INTERGOV'TAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (2008), available at http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm (the most recent, definitive report on global warming), *with* AP, *Warming Gases Rising Faster than Expected: Humans Adding Carbon to the Atmosphere Even Quicker than in the 1990s*, MSNBC.COM (Feb. 14, 2009, 8:02 PM), <http://www.msnbc.msn.com/id/29199545> (indicating the 2007 IPCC report may have underestimated the effects of GHGs emissions), *and* Michael D. Lemonick, *As Effects of Warming Grow, UN Report Is Quickly Dated*, YALE ENV'T 360 (Feb. 12, 2009), <http://www.e360.yale.edu/content/feature.msp?id=2120> (indicating the 2007 IPCC report may have been outdated even at the time of its release in 2007 as newer computer models indicate even more rapid increases in GHGs).

²¹ *Health and Environmental Effects*, EPA, <http://www.epa.gov/climatechange/effects/health.html> (last updated Apr. 27, 2010).

²² *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*, EPA, <http://www.epa.gov/climatechange/endangerment.html> (last updated July 29, 2010).

²³ *See* Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18886 (Apr. 24, 2009), available at <http://www.epa.gov/climatechange/endangerment/downloads/EPA-HQ-OAR-2009-0171-0001.pdf>.

communities, such as land loss due to rising sea levels from melting polar ice.²⁴

These projected health and public welfare effects are essential to understanding the link between GHG emissions and development of local land use policies. Local governments exercise police powers when developing local land use policies, that is, policies protecting public health, safety, and welfare.²⁵ Thus, as global warming theory posits, GHGs pose measureable health and welfare challenges for communities both in health effects as well as in property damage and losses.²⁶ According to global warming theory, because GHGs arise in part from human activities, reducing the incidence of such activities, or the quantity of the emissions arising from the activities, may help reduce or mitigate the global warming trends.²⁷ Therefore local governments arguably have compelling support for claiming that the health and public welfare effects of global warming are proper subjects for local regulation.

III. LAND USE: A QUINTESSENTIAL LOCAL GOVERNMENT FUNCTION

Before discussing land use regulations as related to GHG emissions, a basic understanding of land use decision-making powers is helpful. Land use regulation is a quintessential function of state and local government police power.²⁸ Because the Tenth Amendment expressly limits the scope of federal powers, the residuum is either state police power or power retained by citizens.²⁹

²⁴ See *Coastal Zones and Sea Level Rise*, EPA, <http://www.epa.gov/climatechange/effects/coastal/> (last updated Aug. 19, 2010).

²⁵ *Id.* See generally BLACK'S LAW DICTIONARY, *supra* note 3, at 1276 (stating that local police power is derived from the Tenth Amendment and involves the right "to establish and enforce laws protecting the public's health, safety, and general welfare").

²⁶ Proposed Endangerment, 74 Fed. Reg. at 18886.

²⁷ *E.g.*, AN INCONVENIENT TRUTH, *supra* note 14.

²⁸ See *City of Edmonds v. Oxford House*, 514 U.S. 725, 744 (1995) (Thomas, J., dissenting) ("[L]and-use regulation is one of the historic powers of the States."); *FERC v. Mississippi*, 456 U.S. 742, 768 n.30 (1982) ("[R]egulation of land use is perhaps the quintessential state activity."); see also *supra* note 3 (briefly discussing Dillon's Rule and noting that land use policy is a critical function of local government).

²⁹ The Tenth Amendment states: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." U.S. CONST. amend. X. For a general discussion of the application of the Tenth Amendment to land use, see, for example, John R. Nolon, *In Praise of Parochialism: The Advent of Local Environmental Law*, 26 HARV. ENVTL. L. REV. 365, 366–67 (2002) (discussing the emerging role of local governments in environmental protection); Peter S. Taub, *Land Use Reform and the Clean Air Act After Dolan*, 6 FORDHAM ENVTL. L.J. 731, 736–37 (1995) (discussing the role of local land use decision-making and compliance with the CAA).

A. Zoning and Local Land Use Affirmed as Constitutional

Village of Euclid v. Ambler Realty Co. firmly established the constitutionality of zoning as a local land use regulation.³⁰ According to *Euclid*, local land use regulations are constitutional unless the regulations “are clearly arbitrary and unreasonable, having *no substantial relation* to the public health, safety, morals, or general welfare.”³¹ Just two years later, the U.S. Supreme Court reaffirmed both the *Euclid* principle that a municipality may enact zoning regulations as part of the police power, delegated from the state, as well as the principle that the power to enact such regulations is limited to regulation that bears a “*substantial relation* to the public health, safety, morals, or general welfare.”³² The Supreme Court explained that a court could not simply substitute its judgment for the local municipality.³³ Thus, if the “substantial relation” of the regulation is at least “fairly debatable” and the regulation is not “clearly arbitrary and unreasonable,” a court does not have the general power to substitute its judgment for that of the municipal body.³⁴

Land use regulation is thus a central function of local government, and courts have a limited power of judicial review of local land use decisions.³⁵ If a local land use regulation is substantially related to public health, safety, and welfare issues, the regulation enjoys high deference.³⁶

³⁰ 272 U.S. 365, 395–96 (1926) (rejecting a facial challenge to a local land use ordinance).

³¹ *Id.* at 395 (emphasis added).

³² *Nectow v. City of Cambridge*, 277 U.S. 183, 188 (1928) (rejecting an as-applied challenge to a land use ordinance) (emphasis added).

³³ *Id.* at 187–88.

³⁴ *Moore v. City of E. Cleveland*, 431 U.S. 494, 514 n.1 (1977) (Stevens, J., concurring) (quoting *Zahn v. Bd. of Pub. Works*, 274 U.S. 325, 328 (1927)) (stating that there is a “settled rule” that a court will not substitute its judgment for the local government if the decision was “fairly debatable”); *Vill. of Belle Terre v. Boraas*, 416 U.S. 1, 4 (1974) (quoting *Euclid*, 272 U.S. at 388) (demonstrating deference to local government when zoning decision is “fairly debatable”); *Nectow*, 277 U.S. at 188 (stating that a court’s judgment should generally not be substituted for the local land use decisions, but the local ability to restrict land use is not unlimited and restrictions cannot be imposed without a substantial relation to general welfare). See generally 83 AM. JUR. 2D *Zoning and Planning* §§ 48, 953 (2003) (explaining that the “fairly debatable” standard of review is subject to a threshold of “reasonable debate,” and “if the evidence of reasonableness is insufficient, the presumption of reasonableness is overcome”).

³⁵ Such land use regulations are further limited by a second requirement: the regulation cannot deprive the landowner of “economically viable use of his land.” *Dolan v. City of Tigard*, 512 U.S. 374, 385 (1994) (quoting *Agins v. City of Tiburon*, 447 U.S. 255, 260 (1980)).

³⁶ Leigh Kellett Fletcher notes a second purpose for zoning and design codes: “protecting and enhancing property values.” Leigh Kellett Fletcher, *Green Construction*

B. Limited Federal Usurpation of Local Land Use Decision-Making

Land use policy-making is a central function of local government, but that power is not absolute. In general, the federal government has limited intrusion into local land use decision-making in deference to state and local government powers.³⁷ John Nolon specifically notes that the federal government, not just in a CAA context, follows a general reluctance to interfere with local land use decisions, as evident in the failure to pass the National Land Use Planning Act in the 1970s, that—as the name suggests—called for national land use planning.³⁸

While the federal government has not recently proposed a *generalized* national land use strategy,³⁹ recent issue-specific federal laws may indicate the continued reluctance to supplant traditional land use authority.⁴⁰ For example, the Energy Policy Act of 2005⁴¹ contains provisions that preempt local land use authority based on national energy policy in areas such as the location of liquefied natural gas (“LNG”) terminals in coastal areas⁴² and national “energy right-of-way” corridors for high-voltage electric transmission lines.⁴³ Both are highly

Costs and Benefits: Is National Regulation Warranted?, 24 NAT. RESOURCES & ENV'T 18, 23 (2009).

³⁷ See *supra* note 29 and accompanying text.

³⁸ Nolon, *supra* note 29, at 367 (noting that the House of Representative rejected the proposal to append the National Land Use Planning Act to the National Environmental Policy Act); see also Holly Doremus, *Patching the Ark: Improving Legal Protection of Biological Diversity*, 18 ECOLOGY L.Q. 265, 289 (1991) (noting that the National Land Use Policy Act was rejected due to deference to local land use policy). Further evidence of reluctance of federal intervention in local land use decisions includes, for example, the Coastal Zone Management Act, 16 U.S.C. §§ 1451–66 (2006); e.g., *Am. Petroleum Inst. v. Knecht*, 456 F. Supp. 889, 923 (C.D. Cal. 1978) (stating that “Congress was particularly careful to circumscribe the role of the federal government in particular [energy facility] siting decisions [under the Coastal Zone Management Act]”).

³⁹ Some argue that national land use planning is necessary. See, e.g., Jerold S. Kayden, *National Land-Use Planning in America: Something Whose Time Has Never Come*, 3 WASH. U. J.L. & POL'Y 445 (2000) (arguing for national coordination of land use decision-making).

⁴⁰ Recent general examples of federal preemption in a local land use context include the Telecommunications Act of 1996, 47 U.S.C. § 332(c)(7) (2006) (limiting local land use authority related to siting of mobile telephone network facilities and antennas), and the Religious Land Use and Institutionalized Persons Act (RLUIPA), 42 U.S.C. § 2000cc (2006) (limiting restrictions on land use regulations related to religious groups).

⁴¹ 42 U.S.C. §§ 15801–16538 (2006).

⁴² See Kenneth T. Kristl, *Renewable Energy and Preemption: Lessons from Siting LNG Terminals*, 23 NAT. RESOURCES & ENV'T 58 (2009) (commenting on preemption related to locating liquefied natural gas (LNG) depot facilities in coastal areas under 15 U.S.C. § 717b (2006)).

⁴³ 42 U.S.C. § 15926 (2006) (defining energy right-of-way corridors on federal land). A recent National Public Radio (NPR) series specifically addressed the increasing friction between local communities and federal agencies regarding the national energy corridors and the proposed national electrical grid. *Building Power Lines Creates a Web of Problems*,

controversial with strong state and local opposition,⁴⁴ and both would preempt local land use decision-making when local land use issues conflict with national policies. And while the Energy Policy Act of 2005⁴⁵ demonstrates that Congress may preempt local land use policy-making, the Act does so in a manner limited to specific federal policy objectives.

Thus, land use decisions are made largely by local governments. When the federal government has preempted local authorities related to land use issues, the preemption is typically narrowly defined. Furthermore, the federal government, in deference to the states and local governments, and as limited by the Tenth Amendment,⁴⁶ has not developed a national land use policy.

IV. LOCAL LAND USE POLICY IS DIRECTLY RELATED TO GHG EMISSIONS

Land use directly and indirectly contributes to GHG emissions. Note that the term “land use” commonly has two applications or meanings: (1) the “use of the land” and (2) the policies developed to regulate the use of the land. Both applications are relevant to assessing the effects of land use on GHG emissions.

First, land use can describe the general surface use, or “cover,” of land such as forest, cropland, grassland, commercial development, or residential development.⁴⁷ As land use transitions from lower intensity uses, such as forest and cropland, to more intensive uses, such as commercial development, the resulting land use affects the climate

(NPR radio broadcast Apr. 28, 2009), available at <http://www.npr.org/templates/story/story.php?storyId=103537250>.

⁴⁴ See, e.g., Kristl, *supra* note 42, at 60 (regarding the opposition against the siting of LNG terminals); *Eastern States Reject Electricity Transmission Corridor*, ENV'T NEWS SERV. (Nov. 6, 2007), <http://www.ens-newswire.com/ens/nov2007/2007-11-06-095.asp> (discussing strong gubernatorial opposition to the proposed eastern national corridor); see also National Electric Transmission Congestion Report: Order Denying Rehearing, 73 Fed. Reg. 12959 (Mar. 11, 2008), available at <http://nietc.anl.gov/denial/index.cfm> (information on order denying an appeal for rehearing of the decision on the Mid-Atlantic Area and Southwest Area National Corridors).

⁴⁵ 42 U.S.C. §§ 15801–16524.

⁴⁶ U.S. CONST. amend. X.

⁴⁷ See, e.g., EPA, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2008 7-1 to 7-60 (Apr. 15, 2010), available at http://www.epa.gov/climatechange/emissions/downloads10/US-GHG-Inventory-2010_Report.pdf (discussing the “net greenhouse gas flux” arising from land use change); CITY OF PORTLAND & MULTNOMAH COUNTY, LOCAL ACTION PLAN ON GLOBAL WARMING 2, 18 (Apr. 2001), available at <http://www.portlandonline.com/shared/cfm/image.cfm?id=112115> (noting the necessity of coordinating land use decision-making to reduce greenhouse gas emissions); Gregg Marland et al., *The Climatic Impacts of Land Surface Change and Carbon Management, and the Implications for Climate-Change Mitigation Policy*, 3 CLIMATE POL'Y 149, 150–51 (2003), available at <http://www.fs.fed.us/pnw/mdr/mapss/publications/pdf/marland2003.pdf> (discussing the effects of land use decisions on mitigating climate change).

because the intensity of use correlates with increases in GHG emissions.⁴⁸

Second, land use describes the policies controlling patterns of development such as zoning, comprehensive community planning, and subdivision regulations.⁴⁹ As communities develop new land uses consistent with land use policies, those uses contribute to GHG emissions by, for example, increasing traffic,⁵⁰ replacing natural carbon sinks that reduce GHGs with uses that increase GHG emissions such as parking lots,⁵¹ and increasing utility use.⁵² Land use policies with significant negative effects are commonly, and pejoratively, termed “urban sprawl.”⁵³ Urban sprawl describes post-1940s land development patterns that emphasize decentralized communities and are largely and intentionally accessible by private, motor vehicles.⁵⁴ Sprawling development contributes to GHGs, for example, by increasing traffic and private automobile use as residents of the community are forced to drive to shop, attend school, work, et cetera.⁵⁵

The discussion in this Note focuses primarily on the latter definition of land use: land use as a policy-making tool. It should not be forgotten, however, that the first definition of land use, as the land cover or “use of the land,” is also implicated in global-warming analysis.

⁴⁸ Marland et al., *supra* note 47, at 150–51; see also INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2008, *supra* note 47, at 7-1 (noting GHG flux in forests).

⁴⁹ See J. Kevin Healy, *Local Initiatives*, in GLOBAL CLIMATE CHANGE AND U.S. LAW 421, 426–27 (Michael B. Gerrard ed., 2007).

⁵⁰ AM. PLANNING ASS’N, POLICY GUIDE ON PLANNING & CLIMATE CHANGE 9, 10 (2008), available at <http://www.planning.org/policy/guides/pdf/climatechange.pdf> (“Nationally, the transportation sector is responsible for approximately one-third of CO₂ emissions, and if current trends continue, those emissions are projected to increase rapidly.”).

⁵¹ See *id.* at 8, 9.

⁵² See *id.* at 9–10, 25–26.

⁵³ See WALTER KIESER, CLIMATE PROTECTION CAMPAIGN, LAND USE AND URBAN FORM: OPPORTUNITIES FOR GREENHOUSE GAS EMISSION REDUCTION IN SONOMA COUNTY 1 (Apr. 2007), available at <http://www.climateprotectioncampaign.org/ccap/ccap-report/source-material/6%20Land%20Use.pdf> (describing urban sprawl).

⁵⁴ *Id.* (providing a concise statement of the linkage between land use and GHG reductions); see also John R. Nolon, *Golden and Its Emanations: The Surprising Origins of Smart Growth*, 23 PACE ENVTL. L. REV. 757, 811–19 (2006) (summarizing the efforts of the state of New York to combat sprawl). See generally THE END OF SUBURBIA: OIL DEPLETION AND THE COLLAPSE OF THE AMERICAN DREAM (Electric Wallpaper 2004) (discussing the need for reform in community development priorities) (on file with author); EBEN FODOR, BETTER[,] NOT BIGGER: HOW TO TAKE CONTROL OF URBAN GROWTH AND IMPROVE YOUR COMMUNITY 21–28 (2d ed. 2001) (providing an activist manual for controlling urban growth).

⁵⁵ KIESER, *supra* note 53, at 1.

A. Professional Organizations Recognize the Effect of Poor Land Use Decisions as Contributing to Increased GHG Emissions

Major advocacy and professional organizations related to land use issues recognize the plain link between community development (involving land use policies) and GHG emissions. For example, the U.S. Green Building Council cites as an important organizational objective the need for model land use policies that facilitate green building programs and reduce GHGs.⁵⁶ Smart Growth America, in its citizen's guide for new development, specifically states that ad hoc planning has led to sprawl and significant deterioration of communities including effects on global warming.⁵⁷ Similarly, a recent report by the Union of Concerned Scientists states: "[T]he magnitude of warming that occurs during *this* century—and the extent to which Pennsylvanians will need to adapt—depend largely on energy and land-use choices made within the next few years"⁵⁸ The American Association of State Highway and Transportation Officials ("AASHTO") recently developed a new website for state and local governments to address specific solutions to global warming arising from transportation.⁵⁹

The American Planning Association ("APA") is the foremost authority for community planning professionals in the United States.⁶⁰ The APA's *Policy Guide on Planning & Climate Change* expressly

⁵⁶ U.S. GREEN BLDG. COUNCIL, RESEARCH COMMITTEE POSITION STATEMENT: FUNDING FOR RESEARCH ADVANCING HIGH-PERFORMANCE GREEN BUILDING 3-4 (Mar. 2007), available at <http://www.usgbc.org/ShowFile.aspx?DocumentID=2464>.

⁵⁷ DAVID GOLDBERG, CHOOSING OUR COMMUNITY'S FUTURE: A CITIZEN'S GUIDE TO GETTING THE MOST OUT OF NEW DEVELOPMENT 2, 45-46, available at <http://org2.democracyinaction.org/o/5184/t/1623/signUp.jsp?key=192>.

⁵⁸ UNION OF CONCERNED SCIENTISTS, CLIMATE CHANGE IN PENNSYLVANIA: IMPACTS AND SOLUTIONS FOR THE KEYSTONE STATE 1 (Oct. 2008), available at http://www.ucsusa.org/assets/documents/global_warming/Climate-Change-in-Pennsylvania_Impacts-and-Solutions.pdf.

⁵⁹ Craig D. Brooks, *Notes from the Director*, 10 JOINT LEGISL. AIR & WATER POLLUTION CONTROL & CONSERVATION COMMITTEE NEWSL.: ENVTL. SYNOPSIS 1, 2 (Oct. 2009), available at <http://jcc.legis.state.pa.us/resources/ftp/documents/newsletters/Environmental%20Synopsis%20-%20October%202009.pdf> (solutions include a proposed federal program to coordinate and improve land use decision-making in an effort to reduce vehicle miles driven and thus reduce GHG emissions). According to the American Association of State Highway and Transportation Officials (AASHTO), a new federal transportation bill expressly requires "as a part of the transportation planning process, States and their metropolitan planning organizations must establish greenhouse gas emission reduction targets and strategies to meet those targets." Press Release, AASHTO, New Transportation Website Targets Greenhouse Gases (July 27, 2009), available at http://news.transportation.org/press_release.aspx?Action=ViewNews&NewsID=249. The new AASHTO website, entitled *Real Solutions for Climate Change*, is available at <http://climatechange.transportation.org/> (last visited Nov. 8, 2010).

⁶⁰ See APA Mission and Vision, APA, <http://www.planning.org/apaataglance/mission.htm> (last visited Nov. 15, 2010).

recognizes the link between community planning and GHG emissions, and the guide significantly incorporates land use policy revisions as a method for mitigating associated climate change.⁶¹ Due to the influence of the APA, a detailed overview of current policies may provide insights into land use and climate change relationships.

The policy guide recognizes the fundamental role of local action by noting that “local, state[,] or regional plans are necessary to provide the appropriate guidance for specific areas and communities.”⁶² The APA guide further recommends that “new zoning and development standards should incorporate climate change impacts and implications in required environmental reviews and decision-making. Climate change should be incorporated into comprehensive planning that meets new emission goals and targets.”⁶³ This policy statement indicates that climate change is now a fundamental factor in evaluating the environmental impacts of local land development projects, expanding beyond the immediate-effects analysis traditionally applied by local governments.

In sharp contrast to traditional urban sprawl development, the APA recommends that to mitigate the effects of poor planning, “new policies and regulations should be developed that promote mixed use development, transit-oriented design, and greater development intensity to create communities with land use patterns with reduced energy consumption, fewer vehicle miles traveled[,] and reduced greenhouse gases.”⁶⁴ These recommendations attempt to reduce the primary negative aspects of traditional development, that is, requiring significant traffic infrastructure to support the sprawling development. Regarding these links between land development and traffic, the APA maintains that “[l]and use patterns play a significant role in reducing Vehicle Miles Travelled (“VMT”) and . . . [the] associated greenhouse gas emissions.”⁶⁵

The policy guide specifically recommends that local planning incorporate local energy production, green space creation and preservation, green building practices, assessment of GHG effects when considering development, and local foods production to mitigate GHG emissions.⁶⁶ The APA document and its influence on community planners demonstrate that the APA is not debating *whether* such policy

⁶¹ AM. PLANNING ASS’N, *supra* note 50, at 7–10.

⁶² *Id.* at 13.

⁶³ *Id.* at 39.

⁶⁴ *Id.* Interestingly, the APA’s recommendations are not a radical departure from the CAA itself. The congressional purpose for the CAA states, in part, “that the growth in the amount and complexity of air pollution brought about by urbanization, industrial development, and the *increasing use of motor vehicles*, has resulted in mounting dangers to the public health and welfare.” 42 U.S.C. § 7401(a)(2) (2006) (emphasis added).

⁶⁵ AM. PLANNING ASS’N, *supra* note 50, at 8.

⁶⁶ *Id.* at 7–10.

changes are required, but instead is providing concrete recommendations to affect climate change by implementing and significantly revising local land use policies.

Thus, major professional and advocacy organizations consistently recommend that local action is necessary to address global warming. The weight these organizations carry provides compelling support for local communities seeking to invoke police powers to limit GHG emissions. In other words, the APA firmly establishes the link between land use policy and reducing GHG emissions, thus obviating challenges that such local actions are arbitrary or capricious.⁶⁷

B. Local Government Land Use Policy Revisions to Address GHG Emissions

State governments, especially local governments, are integrating GHG emissions-reduction programs into local land use decision-making.⁶⁸ In September 2008, California passed significant legislation that expressly addresses the link between land use policies and GHG emissions reductions, providing clear direction for local governments to take action.⁶⁹ The California law provides incentives to builders who incorporate GHG reductions into development plans, emphasizes sustainable community design, and encourages reductions in vehicle traffic by encouraging the development of “walkable” communities.⁷⁰

Local, community-specific initiatives are growing. Sonoma County in California released a policy report plainly emphasizing the focus on climate change as the impetus for new land use policies in the county.⁷¹ The policies include emphasizing city redevelopment, directing new community growth to existing cities and urban areas, and using

⁶⁷ See *supra* Part III and notes 28–34 (discussing land use as a quintessential function of local government according to *Vill. of Euclid v. Ambler Realty Co.* and its progeny).

⁶⁸ The analysis in this Note focuses primarily on local government initiatives. States are likewise taking significant actions to reduce GHGs. See generally PACE LAW SCH. CTR. FOR ENVTL. LEGAL STUDIES, UPDATE TO CHAPTER 11—THE STATE RESPONSE TO CLIMATE CHANGE: 50[–]STATE SURVEY (June 25, 2010), available at http://www.abanet.org/abapubs/globalclimate/docs/stateupdate_102908.pdf (providing an online update to Pace Law School Center for Environmental Legal Studies, *The State Response to Climate Change: 50-State Survey*, in GLOBAL CLIMATE CHANGE AND U.S. LAW 371 (Michael B. Gerrard ed., 2007)).

⁶⁹ Press Release, Office of the Governor, Governor Schwarzenegger Signs Sweeping Legislation to Reduce Greenhouse Gas Emissions Through Land-Use (Sept. 30, 2008), available at <http://gov.ca.gov/press-release/10697>.

⁷⁰ *Id.* “Walkable” communities are also termed “new urbanist,” in which communities focus on providing necessary services within walking distance of the home. *E.g.*, THE END OF SUBURBIA, *supra* note 54 (encouraging the development of communities with non-automobile transportation focus).

⁷¹ KIESER, *supra* note 53, at 4–5.

transferrable development credits to minimize growth in rural areas.⁷² The initiatives are intended to reduce vehicular traffic by focusing community growth in areas with existing infrastructure that obviates or minimizes the use of vehicles, thus reducing GHG emissions.⁷³

Montgomery County in Pennsylvania developed a county-level *Climate Change Action Plan*.⁷⁴ The plan addresses links between land use policies and GHG emissions reductions, and especially emphasizes the critical link between transportation and GHG emissions: “Land use and transportation are inextricably linked. Research has shown the compactness and integration of uses in a community encourages a decrease in the [number] of vehicle miles traveled.”⁷⁵ The report also emphasizes the need to maintain green space (for example, forests and open areas) to help mitigate GHGs.⁷⁶

The Minnesota Climate Change Advisory Group, a leading advocacy group for Minnesota cities, unanimously approved a plan to reduce GHG emissions in the state.⁷⁷ The primary focus of the unanimously adopted initiative was “improving land use planning and development practices.”⁷⁸ The goals of the plan included focusing development in already-urbanized areas, reducing development in rural areas by increasing minimum lot size requirements for rural development projects, and implementing state-wide reductions in vehicle miles traveled.⁷⁹

As is evident in these examples, local governments are addressing GHG emissions through local police powers and local land use policies. The initiatives largely address the fundamental links between transportation, land development, open space preservation, and general land use policies in an effort to address GHG emissions comprehensively.

⁷² See *id.* at 4.

⁷³ *Id.* at 1–3.

⁷⁴ MONTGOMERY CNTY. GREENHOUSE GAS REDUCTION TASK FORCE, GREENPRINT FOR MONTGOMERY COUNTY: CLIMATE CHANGE ACTION PLAN 2 (Dec. 2007), available at <http://greenprint.montcopa.org/greenprint/cwp/view,a,1657,q,63169,greenprintNav,%7C.asp>.

⁷⁵ *Id.* at 27.

⁷⁶ *Id.* at 28, 30. Similar initiatives in Pennsylvania include Chester County’s task force, see GHGR TASK FORCE, CHESTER CNTY., PA, <http://dsf.chesco.org/chesco/cwp/view.asp?a=1511&q=633902> (last visited Nov. 7, 2010), and a green infrastructure initiative in Lancaster County, *Greenscapes*, LANCASTER CNTY. PLANNING COMM’N, <http://www.co.lancaster.pa.us/planning/cwp/view.asp?a=2&q=624655> (last updated Apr. 15, 2010).

⁷⁷ MINN. CLIMATE CHANGE ADVISORY GRP., LAND USE PLANNING KEY TO REDUCING GREENHOUSE GAS EMISSIONS (rev. Feb. 3, 2009), available at http://www.gmetrust.org/wp-content/uploads/2009/10/landuse_mccag_final_020309.pdf.

⁷⁸ *Id.*

⁷⁹ *Id.*

V. MASSACHUSETTS *v.* EPA—A CATALYST FOR FEDERAL GHG REGULATION

Until 2007, whether the federal government had the power to regulate GHGs was uncertain.⁸⁰ Thus, the federal government apparently could not preempt a local land use ordinance that was based on mitigating GHG emissions because no express federal power existed to affect the preemption as related to GHGs.⁸¹ The Clean Air Act, a likely candidate for the regulation of GHGs, regulated air pollutants—not GHGs *per se*⁸²—and the primary GHGs, with the exception of nitrous oxide, are not listed air pollutants under the CAA.⁸³ *Massachusetts v. EPA*,⁸⁴ however, served as a catalyst for resolving the uncertainty related to federal regulation of GHGs—albeit not a complete resolution.⁸⁵

A discussion of GHG issues is incomplete without a few comments on *Massachusetts v. EPA*, in which the Supreme Court first tackled climate change.⁸⁶ The Supreme Court held that the EPA Administrator has the statutory power to regulate CO₂, a GHG, from mobile sources.⁸⁷ The case involved an effort by states and other entities to force the EPA to regulate CO₂ emissions in an effort to reduce the effects of global warming.⁸⁸ The Court held that the refusal to regulate CO₂ from mobile sources was arbitrary and capricious.⁸⁹ Note, however, that the Court did not specifically say the EPA *must* regulate CO₂.⁹⁰ Rather, the EPA

⁸⁰ Arnold W. Reitze, Jr., *Federal Control of Carbon Dioxide Emissions: What Are the Options?*, 36 B.C. ENVTL. AFF. L. REV. 1, 1–2 (2009).

⁸¹ *Id.*

⁸² *Regulating Greenhouse Gases Under the Clean Air Act*, WORLD RESOURCES INSTITUTE, Apr. 2009, at 1, available at http://pdf.wri.org/bottom_line_ghg_clean_air.pdf.

⁸³ The six common criteria air pollutants, standardized by the EPA through National Ambient Air Quality Standards under the CAA are ozone, particulate matter, carbon monoxide, nitrous oxide, sulfur dioxide, and lead. *Compare What Are the Six Common Air Pollutants?*, EPA, <http://www.epa.gov/air/urbanair/> (last updated July 1, 2010), and *Air Pollutants*, EPA, <http://www.epa.gov/air/airpollutants.html> (last updated Feb. 20, 2009) (listing all air pollutants, including hazardous air pollutants), with U.S. ENERGY INFO. ADMIN., *supra* note 1, at 1 (GHGs include carbon dioxide, methane, and nitrous oxide).

⁸⁴ 549 U.S. 497 (2007).

⁸⁵ Arguably, the *Massachusetts v. EPA* holding does not expressly state that the EPA must regulate CO₂ in new motor vehicles, but instead holds that the EPA cannot evasively cite “uncertainty” as the basis for not regulating CO₂. *See id.* at 505, 534.

⁸⁶ *See generally* Lisa Heinzerling, *Climate Change in the Supreme Court*, 38 ENVTL. L. 1 (2008) (a cogent “insider” assessment of the posture and outcomes of *Massachusetts v. EPA*).

⁸⁷ 549 U.S. at 505, 528.

⁸⁸ *Id.* at 505, 528. *See also* Heinzerling, *supra* note 86, at 1–4.

⁸⁹ 549 U.S. at 528, 534–35.

⁹⁰ Holly Doremus & W. Michael Hanemann, *Of Babies and Bathwater: Why the Clean Air Act’s Cooperative Federalism Framework Is Useful for Addressing Global*

cannot claim that it does not have the statutory power to regulate CO₂ because CO₂ is not an “air pollutant” as defined by the CAA, and thus not subject to regulation by the EPA via the CAA.⁹¹ While *Massachusetts v. EPA* was less than conclusive, the holding does advance the debate on federal GHG regulation and has led to more recent developments in which the EPA has initiated efforts to regulate CO₂ formally as a GHG under the CAA.⁹²

The Court’s opinion in *Massachusetts v. EPA* does appear to allow agency deference in the CO₂ regulation issue. In an article on agency deference in interpreting regulations, Lisa Schultz Bressman argues that congressional delegation of regulatory functions should rarely be overturned as long as the regulation is not “so illogical as to constitute virtual category mistakes or polar opposites.”⁹³ Bressman states that if Congress delegates the regulation of *x* to an agency, the agency is not authorized to regulate *y*.⁹⁴ But a corollary, and the issue largely at stake in *Massachusetts v. EPA*, is also true: “[W]hen Congress instructs an agency to regulate *x*, it cannot decline to regulate one type of *x*.”⁹⁵ Thus, if the EPA can regulate air pollutants and if CO₂ is an air pollutant, then the EPA cannot decline to regulate CO₂.⁹⁶ Arguably, applying

Warming, 50 ARIZ. L. REV. 799, 831 n.171 (2008). It is worth noting, however, the compelling contrary views that argue the CAA structure is not intended to address climate change. *E.g.*, Jason Scott Johnston, *Climate Change Confusion and the Supreme Court: The Misguided Regulation of Greenhouse Gas Emissions Under the Clean Air Act*, 84 NOTRE DAME L. REV. 1, 1–2 (2008) (stating that claims by environmentalists that *Massachusetts v. EPA* was an “important victory in the battle to curb global warming” are “alarmist” and that “in the short-to-medium run, a warmer climate will be predominantly beneficial, rather than harmful, to the United States”).

⁹¹ 549 U.S. at 528–530. Note, however, that the effect of the decision did not leave the EPA with much room to conclude regulation was unnecessary. Doremus & Hanemann, *supra* note 90, at 831 n.171.

⁹² See *supra* notes 22–24. The latest summary of the EPA regulatory agenda for both current and long-term regulatory strategy indicates that the EPA incontrovertibly seeks to regulate CO₂ under the authority of the CAA, including requiring mandatory reporting of GHGs, offering specific findings that GHGs endanger public health, and developing scientific methods for measuring GHGs for long-term monitoring. EPA, EPA-230-Z-09-001, SPRING 2009 SEMI-ANNUAL REGULATORY AGENDA 36, 44, 69 (2009), available at <http://www.epa.gov/lawsregs/documents/regagendabook-spring09.pdf>. For a concise, current summary of the proposed mandatory GHG reporting rule, see Seth A. Rice, *EPA’s Mandatory Greenhouse Gas Emission Reporting Rule Takes Shape*, TRENDS, Sept./Oct. 2009, at 13.

⁹³ Lisa Schultz Bressman, *Chevron’s Mistake*, 58 DUKE L.J. 549, 585 (2009).

⁹⁴ *Id.*

⁹⁵ *Id.* at n.156.

⁹⁶ *Id.* A similar analysis with a similar result arose in the mid-1970s related to lead pollution. Lead in motor fuels was deemed a criteria pollutant under the CAA; once lead was listed, the EPA did not have discretion not to regulate it as an air pollutant. *Natural Res. Def. Council v. Train*, 411 F. Supp. 864, 870 (S.D.N.Y. 1976).

Bressman's logic, *Massachusetts v. EPA* does pave the way to regulating CO₂ as an air pollutant subject to the CAA regulatory structure.

As of this writing, there is little doubt that the EPA will regulate CO₂.⁹⁷ The power to regulate is evident; the *will* to regulate is now also evident. Under the Obama Administration, the EPA is moving rapidly to reconsider the Bush Administration's refusal to take action, even after *Massachusetts v. EPA*, to regulate CO₂.⁹⁸ As indicated above, the administration has set aggressive goals for GHG emissions reductions—a 28% reduction by 2020.⁹⁹ The EPA is also taking direct action to regulate CO₂ as a criterion pollutant under the CAA.¹⁰⁰

VI. FUNDAMENTAL LIMITS ON FEDERAL PREEMPTION

The Supremacy Clause of the Constitution allows federal law preemption of state or local laws when they conflict with the federal law.¹⁰¹ There are two types of preemption: field preemption, in which the regulatory scheme is so comprehensive that the state is left with little or no room to regulate, and conflict preemption, in which complying with both a federal and state law is logically impossible.¹⁰² In the CAA context, “the CAA does not preclude state and local regulation of air pollution, so long as any state or local regulation is no less strict than

⁹⁷ See *supra* notes 22–23, 92.

⁹⁸ Press Release, EPA, EPA Administrator Jackson Orders Review of Key Clean Air Document (Feb. 17, 2009) available at <http://yosemite.epa.gov/opa/admpress.nsf/8b770facf5edf6f185257359003fb69e/3274377ad2d9fc42852575600077efb5!OpenDocument>.

Environmental groups have strongly supported the review of CO₂. *E.g.*, Posting of Terry Winckler to unEARTHED Blog, Update: Obama's Six Easy Things, <http://unearthed.earthjustice.org/blog/2009-february/update-obamas-six-easy-things> (Feb. 18, 2009, 11:30 AM) (commenting that the Obama Administration's review of the Bush Administration decision not to regulate CO₂ via the CAA was “[o]ne of the most significant actions” of the Obama Administration).

⁹⁹ *Energy & Environment*, *supra* note 2.

¹⁰⁰ See *supra* notes 22–23, 92.

¹⁰¹ U.S. CONST. art. VI, cl. 2; see, e.g., *Crosby v. Nat'l Foreign Trade Council*, 530 U.S. 363, 371, 372, 388 (2000) (holding a Massachusetts law limiting trade with Burma impermissibly interfered with federal law and presidential powers and was thus preempted); *CSX Transp., Inc. v. Easterwood*, 507 U.S. 658, 663–64 (1993) (superseded by statute on other grounds) (noting railroad crossings are regulated by federal law that preempts state tort law actions regarding railroad crossings); *Se. Oakland Cnty. Res. Recovery Auth. v. City of Madison Heights*, 5 F.3d 166, 168 (6th Cir. 1993) (holding a community cannot adopt clean air standards as part of police powers to prevent location of an incinerator when such standards conflict with federal standards). See generally 61B AM. JUR. 2D *Pollution Control* § 150 (2010) (summarizing retention of state authority and preemption issues in the CAA context).

¹⁰² See *Geier v. Am. Honda Motor Co.*, 529 U.S. 861 (2000) (providing an extensive discussion of the preemption doctrine in context of a negligence case related to automobile air bags); *Gade v. Nat'l Solid Wastes Mgmt. Assoc.*, 505 U.S. 88, 98 (1992) (regarding preemption in a health-and-safety regulation context).

federal standards.”¹⁰³ The shared responsibility for regulation in the CAA between federal, state, and local governments indicates that the CAA is not a comprehensive scheme preempting all state and local regulations; to the contrary, the CAA expressly provides for such shared regulation.¹⁰⁴ Thus, preemption issues related to local regulations are likely to arise as conflict preemption on a case-by-case basis and not in the context of field preemption.

A. Federal Statute Does Not Preempt Local Land Use, GHG-Related Regulations

Conflict preemption could technically arise in two contexts: (1) direct conflict between a local regulation and federal law or (2) conflict between a local regulation and state law.¹⁰⁵ Regarding the latter conflict, “nowhere does the CAA affirmatively grant *local* governments the independent power to regulate air pollution.”¹⁰⁶ Logically, therefore, any air pollution regulatory powers by the local government may derive indirectly from state grants of such power to the local governments.¹⁰⁷ Thus, at the minimum, the local government initiatives cannot conflict with state initiatives or state air pollution regulation policy. The source of this conflict is the limit on delegated powers from the state to local governments.

The former issue, a conflict between federal and local policy, is the focus of this discussion.¹⁰⁸ As related to land use regulation, the federal preemption issue is distinguished from preemption arising from, for example, local building codes and other local laws.¹⁰⁹ While both land use regulations and building codes may implicate local government

¹⁰³ *Se. Oakland Cnty.*, 5 F.3d at 169 (citing 42 U.S.C. § 7401(a)(3) (1993)).

¹⁰⁴ *See* 42 U.S.C. §§ 7401(a)(3)–(4), 7402(a), 7416, 7431 (2006).

¹⁰⁵ The latter conflict between state and local air policies is mentioned in this Note, but is not the subject of the discussion.

¹⁰⁶ *Se. Oakland Cnty.*, 5 F.3d at 169 (emphasis added).

¹⁰⁷ *See id.*

¹⁰⁸ The CAA expressly recognizes that air pollution regulation fundamentally involves state and local actors: “[A]ir pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the *primary responsibility of States and local governments . . .*” 42 U.S.C. § 7401(a)(3) (2006) (emphasis added). Thus, state and local actions are presumed to be a fundamental part of any air pollution regulatory scheme.

¹⁰⁹ Leigh Kellett Fletcher discusses the emerging conflict between local green building initiatives and federal regulation of GHGs in a recent article and specifically notes the conflicts between land use regulations and green building. Fletcher, *supra* note 36, at 20–24. In the green building context, Fletcher cogently notes that local green building initiatives are in potential conflict with national regulatory policies. *Id.* at 23. Fletcher further cautions that federal preemption may needlessly threaten local initiatives. *See id.* at 24.

regulation of GHG emissions, issues related to building codes deal more directly with statutory preemption—especially when the local codes attempt to establish local energy efficiency standards for appliances that conflict with specific national standards.¹¹⁰

For example, a case closely watched by attorneys in the U.S. District Court for the District of New Mexico was brought by the Air Conditioning, Heating, and Refrigeration Institute challenging a green building code implemented by the City of Albuquerque.¹¹¹ The code establishes, among other objectives, a rigorous green buildings program to enhance energy efficiency within the city as part of the city's 2030 Challenge Program.¹¹² The industry group challenged the energy efficiency requirements related to "HVAC¹¹³ products and water heaters" because, the group alleges, the standards directly conflict with federal law on energy efficiency and are thus preempted by the federal law.¹¹⁴ The group specifically cites conflict with the Energy Policy and Conservation Act.¹¹⁵

¹¹⁰ The distinction is subtle but important. The CAA provides for state and local government roles in implementing air pollution standards, for example, 42 U.S.C. § 7401 (2006), whereas the energy efficiency standards are set by federal agencies without provision for state or local input. Energy efficiency standards for common household appliances, for example, are set by the U.S. Department of Energy. *State Appliance Standards*, U.S. DEP'T OF ENERGY, http://www.eia.doe.gov/emeu/efficiency/appliance_standards.html (last updated Aug. 2010). Standards for air conditioning equipment are also set by the Department of Energy. *Analysis of Efficiency Standards for Air Conditioners, Heat Pumps & Other Products*, U.S. DEP'T OF ENERGY, <http://www.eia.doe.gov/oiaf/servicerpt/eff/> (Feb. 2002).

¹¹¹ *E.g.*, Leslie Guevarra, *Federal Judge Puts Albuquerque's Green Building Code on Hold*, GREENER BLDGS. (Oct. 6, 2008), <http://www.greenbiz.com/news/2008/10/06/federal-judge-puts-albuquerque-green-building-code-hold> (referencing *Air Conditioning, Heating & Refrigeration Institute v. City of Albuquerque*, No. Civ. No. 08-633 MV/RLP, 2008 U.S. Dist. LEXIS 106706, at *2 (D.N.M. Oct. 3, 2008)).

I thank attorney Alan Flenner for identifying this important case and noting its significance. Telephone Interview with Alan Flenner, Associate, High Swartz, LLP, (Jan. 15, 2009).

¹¹² *Green Building*, CITY OF ALBUQUERQUE, <http://www.cabq.gov/albuquerquegreen/green-goals/green-building> (last visited Nov. 8, 2010).

¹¹³ HVAC stands for heating, ventilation, and air conditioning equipment. EPA, A GUIDE TO ENERGY-EFFICIENT HEATING AND COOLING 2 (Aug. 2009), available at http://www.energystar.gov/ia/partners/publications/pubdocs/HeatingCoolingGuide%20FINAL_9-4-09.pdf.

¹¹⁴ *Air Conditioning, Heating & Refrigeration Inst.*, 2008 U.S. Dist. LEXIS 106706 at *2-3.

¹¹⁵ *Id.* at *2. The City of Albuquerque defended by emphasizing that the standards implemented by the city and at issue are not mandatory requirements, but are simply one option to meet the new code. *Id.* at *22.

I thank Chief District Judge Martha Vazquez and her very helpful staff for kindly providing valuable information regarding this case.

Air Conditioning, Heating, and Refrigeration Institute is mentioned here to provide important contrast to the type of preemption at issue in a more generalized land use ordinance. Because the CAA does not expressly preempt state and local initiatives and because it even arguably encourages such initiatives,¹¹⁶ the particularized express preemption of the type asserted in *Air Conditioning, Heating, and Refrigeration Institute* would not likely arise when challenging a generalized local land use ordinance in which the locality has compelling support for enacting such policy decisions. A specific energy efficiency standard is markedly different from a local zoning ordinance or local comprehensive plan that justifies local land use decisions by citing global warming and GHG emissions reductions as its purpose. In other words, there is likely no express preemption at stake in the *generalized* land use policy.

Therefore, while the CAA is a complex statutory section, the CAA does not expressly preempt the field in air pollution regulation.¹¹⁷ The CAA, instead, is an example of cooperative federalism in which states (and by delegation, local governments) and the federal government cooperate to affect the regulatory goals of the CAA.¹¹⁸ Thus, the CAA itself does not delegate exclusive GHG regulation and policy-making to the federal government, but rather shares those policy-making roles among federal, state, and local actors.¹¹⁹

B. 42 U.S.C. § 7431—Express Limits on Federal Interference with Local Land Use Decisions

The preemption of a land use ordinance based on a claim of conflict with the CAA is apparently limited by a lesser-known statutory provision within the CAA itself.¹²⁰ The statute, entitled “Land Use

¹¹⁶ See 42 U.S.C. §§ 7401, 7416 (2006).

¹¹⁷ The purpose of the CAA is to address air pollution at a national level. *Id.* §§ 7401, 7402. Yet the statutory structure of the CAA, especially for non-mobile sources, specifically acknowledges the continuing viability of state and local programs when those programs enforce air quality standards no less than those required by EPA regulations. *Id.* §§ 7401, 7402, 7416.

¹¹⁸ Doremus & Hanemann, *supra* note 90, at 799–801.

¹¹⁹ 42 U.S.C. § 7401(a)(3) (“[A]ir pollution control at its source is the primary responsibility of States and local governments”); *Id.* § 7416 (stating that the exception of some mobile sources, the CAA does not exclude state and local regulations as long as those regulations are not “less stringent” than federal standards). See generally Johnston, *supra* note 90, at 9–56 (detailing the problems of applying the CAA to reduce emissions to mitigate generalized climate change).

¹²⁰ Note, however, that at least one Environmental Appeals Board (EAB) decision does indicate that the EPA defers to local land use agencies related to selecting sites for CAA-regulated projects and specifically cites Section 7431 as the statutory justification for the deference. *In re* S. Shore Power, L.L.C., 2003 WL 21500413, at *16 (EAB 2003) (order denying review) (citing *In re* Haw. Elec. Light Co., 8 E.A.D. 66, 109 (EAD 1998)). In

Authority” and codified at 42 U.S.C. § 7431, reads: “Nothing in this chapter constitutes an infringement on the existing authority of counties and cities to plan or control land use, and nothing in this chapter provides or transfers authority over such land use.”¹²¹

As noted by law professor Susan Smith, Congress twice affirmed the limits in this statutory provision during revisions and amendments to the CAA in 1977 and 1990.¹²² Thus, Congress appears to have restricted the CAA specifically and repeatedly as related to land use issues.¹²³ Analyzing the language used in Section 7431, Congress appears to have limited the ability to use the CAA to trump local land use ordinances.¹²⁴

Of particular importance to the analysis in this Note is the fact that Section 7431 was enacted in response to concerns that CAA regulation of indirect sources of mobile air pollutant emissions was directly interfering with local land use powers.¹²⁵ The argument derives from federal infringement on state and local government powers contrary to the Tenth Amendment.¹²⁶ The CAA power to regulate “mobile sources” included power to regulate transportation-related, mobile, indirect sources of air pollutants such as parking lots and highways, that is, sources related to transportation.¹²⁷ Section 7431 expressly limited this

another significant case brought before the EAB, activists for environmental justice claimed the CAA should allow re-siting of an energy plant to avoid disrupting a traditional black neighborhood; the EPA cited Section 7431 as evidence that siting decisions are *per se* local decisions. Eileen Gauna, *Major Sources of Criteria Pollutants in Nonattainment Areas: Balancing the Goals of Clean Air, Environmental Justice, and Industrial Development*, 3 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 379, 393 (1996) (citing 42 U.S.C. § 7431 (1994)).

¹²¹ 42 U.S.C. § 7431.

¹²² Susan L. Smith et al., *Clean Air Act*, in 3 ENVIRONMENTAL LAW PRACTICE GUIDE: STATE AND FEDERAL LAW § 17.03(2)(d), at 17-89 (Michael B. Gerrard, ed.); (see also Clean Air Act Amendments, Pub. L. No. 101-549, 104 Stat. 2399, 2689 (1990) (codified at 42 U.S.C. § 7431 (2006)) (providing the current text of Section 7431).

¹²³ See Keith Bartholomew, *Cities and Accessibility: The Potential for Carbon Reductions and the Need for National Leadership*, 36 FORDHAM URB. L.J. 159, 197-98 (2009). In the context of transportation planning, planners hoped for coordination of land use and CAA conformity requirements despite the fact that the “Clean Air Act specifically disavows any ‘infringement on the existing authority of counties and cities to plan or control land use.’” *Id.* at 197.

¹²⁴ See 11A STACY L. DAVIS ET AL., FEDERAL PROCEDURE, LAWYERS EDITION § 32:165 (West 2010) (describing retention of state authority as related to the CAA).

¹²⁵ Nolon, *supra* note 29, at 366-67 & n.4; Smith et al., *supra* note 122, at 17-89.

¹²⁶ The Tenth Amendment limits the federal government powers to those powers enumerated in the U.S. Constitution and reserves other powers to the states or the people. U.S. CONST. amend. X; see also Nolon, *supra* note 54, at 812 n.321.

¹²⁷ Robert W. Adler, *Integrated Approaches to Water Pollution: Lessons from the Clean Air Act*, 23 HARV. ENVTL. L. REV. 203, 248-50 & n.285 (1999) (providing an excellent summary of CAA effects); John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 MD. L. REV. 1183, 1206-07 (1995) (noting Section 7431 was enacted in response to state opposition to perceived federal encroachment on land use decision-making);

power to regulate such “indirect” mobile sources due to the inherent conflict between local land use powers and the CAA, and it also expressly stated that the CAA could not be used to interfere with local land use decisions.¹²⁸

As analyzed above, local land use ordinances dealing with GHG emissions regulation typically address the indirect GHG emissions arising from transportation.¹²⁹ The tensions arising from the intersection of transportation-related air pollution controls under the CAA and local government powers related to land use are not new. As early as 1993, attorney Peter A. Buchsbaum presciently cautioned that despite the apparent limits imposed by Section 7431, inherent conflict exists between the CAA and local land use decision-making related to reducing vehicular traffic¹³⁰: “Thus, despite the lack of direct land-use powers accorded to the federal government in the Clean Air Act, the Act will affect local land-use decision[-]making at least indirectly, by influencing choices for commutation and hence where housing and industry can locate”¹³¹ According to law professor Robert Adler, the backlash and resistance by local and state governments to CAA-related interference with local land use powers contributed to the enactment and affirmation of Section 7431.¹³²

In 1994, Buchsbaum and attorney Thomas C. Shearer insightfully noted the inherent potential for conflict between local land use decisions and environmental regulation as evident in the CAA: “[The CAA] states that its requirements do not override the existing authority of counties and cities over land use, notwithstanding the fact that the Clean Air Act’s restrictions on commuter traffic are likely to have significant indirect land-use implications and could be the future “sleeping giant” of land-use and growth-management policy.”¹³³

Thus, Section 7431 apparently intentionally poses a formidable obstacle to any claim that the CAA supports federal preemption of local land use ordinances that address GHG emissions. Rather, the CAA by definition recognizes the fundamental roles of states and local

Annotation, *What Are “Land-Use and Transportation Controls” [That] May Be Imposed, Under § 110 (a)(2)(b) of Clean Air Act of 1970 (42 USCS § 1857c-5(a)(2)(B)), to Insure Maintenance of National Primary Ambient Air Quality Standards[?]*, 30 A.L.R. FED. 156 (1976, rev. 2008) (discussing the limits on land use controls related to the CAA).

¹²⁸ DAVIS ET AL., *supra* note 124, at § 32:165; Smith et al., *supra* note 122, at 17–89.

¹²⁹ See *supra* Part IV.B.

¹³⁰ See Peter A. Buchsbaum, *Federal Regulation of Land Use: Uncle Sam the Permit Man*, 25 URB. LAW. 589, 624–25 & nn.174, 176 (1993).

¹³¹ *Id.* at 625.

¹³² Adler, *supra* note 127, at 247–48.

¹³³ Peter A. Buchsbaum & Thomas C. Shearer, *Report of the Subcommittee on Federal Regulation of Land Use*, 26 URB. LAW 831, 837 (1994).

governments in regulating the sources of air pollutants.¹³⁴ As an express limit on CAA application to land use decisions, Section 7431 is not surprising in this context.

C. A Suggested Test for Applying 42 U.S.C. § 7431

Section 7431 is a limit on the application of the CAA by the federal government in certain land use situations. Practically speaking, however, the statute does not appear to be an absolute bar on all land use-related decisions. While courts have not yet developed a test for applying Section 7431, the following three elements seem to be a requirement to invoke Section 7431 protection:

(1) The party seeking protection via Section 7431 must be a local government actor, such as a county or city, seeking to control land use or plan land use activities;¹³⁵

(2) The regulation, statute, or action challenged by the local government actor must fall within the scope of the CAA;¹³⁶ and

(3) A more specific statute or regulation does not preempt the Section 7431 protection.¹³⁷

As is evident in the suggested test, Section 7431 is not an absolute bar but is rather a compelling defensive tool for local governments in specific circumstances. These circumstances include two primary scenarios: (1) when a party asserts the CAA as the basis for imposing upon or interfering with local land use authority (imposition scenario) and 2) when a party seeks to avoid a local land use regulation that, for example, enacts GHG-related policies (avoidance scenario).¹³⁸ In either

¹³⁴ 42 U.S.C. § 7401(a)(3) (2006).

¹³⁵ *Id.* § 7431 (2006).

¹³⁶ Here, the local government actor challenges an action, regulation, or statute that was invoked by a party (e.g., a federal government actor) claiming the CAA as the authority for the action, regulation, or statute. In this case, Section 7431 could apply because Section 7431 is a limit on actions arising from the CAA. *See, e.g., id.* §§ 7401, 7402, 7431 (2006) (defining the scope of the CAA, the express cooperative nature of the CAA, and the exemption regarding local land use activities).

¹³⁷ *See supra* Part VI.A and note 40. This prong of the suggested test includes those situations in which the CAA is attenuated or indirectly related to the regulation challenged. An attenuated application may apply, for example, in selecting a site for a power generation facility or an incinerator. In these cases, the CAA is implicated because the power generation facility may need to comply with the CAA, but the CAA is not implicated directly in the land use decision to site the facility at the specific location in conflict with local land use regulations. *E.g., Se. Oakland Cnty. v. City of Madison Heights*, 5 F.3d 166, 168 (1993) (community impermissibly attempted to adopt local clean air standards to prevent location of an incinerator that would otherwise be permissible at the proposed site, that is, according to local land use regulations).

¹³⁸ The latter scenario is supported by implication from Section 7416 that expressly allows state, and by extension local actors, to enact air quality regulations as long as those regulations are not *less stringent* than federal standards—thus allowing state actors,

scenario, as the test above proposes, the local government body can invoke Section 7431 for protection as long as the local regulation is not preempted by a more specific statute or regulation and as long as the local regulation is directly related to land use decision-making authority (that is, it is not an attenuated application).

VII. CONCLUSION—LOCAL GOVERNMENT POWER TO REGULATE GHGS

As demonstrated, local land use policy decisions related to GHG reductions are arguably protected under the current federal statutory and regulatory structures. The protections arise from the following:

(1) Well-settled law, relying on the Tenth Amendment,¹³⁹ establishing land use as a quintessential function of local government;¹⁴⁰

(2) The reluctance of the federal government when developing federal laws that preempt local land use decision-making, such as the Energy Policy Act of 2005, to interfere with the traditional balance of federalism beyond limited preemption for specifically defined purposes;¹⁴¹ and

(3) The express limitation of the application of the CAA, in which the CAA is the presumptive federal means to regulate GHGs, in land use contexts through Section 7431.¹⁴²

Together, these provisions provide compelling support for local initiatives that attempt to reduce or mitigate GHG emissions. Unless the federal government implements a new statutory and regulatory scheme to address GHGs and similar pan-jurisdictional pollutants,¹⁴³ local governments, consistent with state mandates, should have significant latitude to address GHG emissions on a local level directly using traditional land use regulatory powers.

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presumably, to adopt *more stringent* standards. 42 U.S.C. § 7416 (2006). See *supra* Part III for discussion of the relationship between state and local governments and the delegation of state police power.

¹³⁹ U.S. CONST. amend. X.

¹⁴⁰ See *supra* Part III.

¹⁴¹ See *supra* Part III.B.

¹⁴² See *supra* Part VI.B.

¹⁴³ Some argue that the CAA is not the proper structure to address GHGs. For example, Jason Scott Johnston claims that “the pollution Congress attacked in the CAA was not interregional or interjurisdictional, but primarily local.” Johnston, *supra* note 90, at 13.