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WHO SHOULD REGULATE? FEDERALISM AND CONFLICT IN REGULATION OF GREEN BUILDINGS

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In Federalist 32, Alexander Hamilton articulated the fundamental concept of divided federalism—

But as the plan of the [Constitutional] convention aims only at a partial union or consolidation, the state governments would clearly retain all the rights of sovereignty which they before had, and which were not, by that act exclusively delegated to the United States.¹

The Founding Fathers could hardly have envisioned a world where industrial pollution was causing shifts in the climate across the globe, although the hot Philadelphia summer of 1787² might have foreshadowed the effects of global warming in their minds. Nonetheless, more than two hundred years later, the federalist system whereby regulatory power is divided between the states and the federal government is indeed playing a major role in the regulation of climate change in general,³ and the regulation of green buildings in particular.⁴

In this article, the fundamental federalism issue of which level of government is best equipped to effectively regulate green buildings will

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¹ THE FEDERALIST No. 32, at 196–97 (Alexander Hamilton) (E.H. Scott ed., 1898).

² DAVID O. STEWART, THE SUMMER OF 1787: THE MEN WHO INVENTED THE CONSTITUTION 81–82 (2007) (indicating that delegates to the Constitutional Convention complained of the summer heat, but also indicating that studies show the summer was not abnormally hot).

³ See Robert B. McKinstry, John C. Dembach & Thomas D. Peterson, *Federal Climate Change Legislation as if the States Matter*, NAT. RESOURCES & ENV'T, Winter 2008, at 3–4.

⁴ See *infra* Part II.A.

be addressed. Before arriving at that destination, however, it is worthwhile to examine the recent history of green building regulation in the United States, which will be addressed in Part I. Part II will address several Constitutional considerations impacting green building regulations, including *Air Conditioning, Heating, and Refrigeration Institute v. City of Albuquerque*, which challenged the City of Albuquerque's green building regulations on federal preemption grounds.⁵ Part III will examine the relative benefits and drawbacks of state and local control of green building regulations versus regulation at the federal level. Finally, Part IV will propose a cooperative federalist approach modeled on the regulatory scheme of the Clean Air Act, as amended, which provides localities with the opportunity to reap some of the benefits of common federal regulation while maintaining historic state and local control of building regulation.⁶

I. HISTORY OF GREEN BUILDING REGULATION IN THE UNITED STATES

A. *What Are Green Buildings?*

Before examining the issues related to regulating green buildings, it is critical to define what constitutes a "green building."⁷ There can be no doubt that the built environment has an enormous environmental impact.⁸ "In the United States alone, buildings account for: 72% of electricity consumption, 39% of energy use, 38% of all carbon dioxide (CO₂) emissions, 40% of raw materials use, 30% of waste output (136 million tons annually), and 14% of potable water consumption."⁹

Therefore, a "green building" is a structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner.¹⁰ Ideally, green buildings are designed and operated to meet certain

⁵ *Air Conditioning, Heating, and Refrigeration Inst. (A.H.R.I.) v. City of Albuquerque*, Civ. No. 08-0633, 2008 U.S. Dist. LEXIS 106706, at *2 (D.N.M. Oct. 3, 2008).

⁶ Clean Air Act, 42 U.S.C. §§ 7404–7647q (2006).

⁷ Green Buildings are known by many other monikers, such as High-Performance Buildings, Sustainable Buildings, and so forth. U.S. Env'tl. Prot. Agency, Green Building: Basic Information, <http://www.epa.gov/greenbuilding/pubs/about.htm> (last visited Nov. 7, 2009). 'Green Buildings,' however, is the term which has captured the popular imagination, and will be used throughout this article.

⁸ See Charles J. Kibert, *Policy Instruments for a Sustainable Built Environment*, 17 J. LAND. USE & ENVT'L L. 379, 379–81 (2002).

⁹ U.S. Green Bldg. Council, Green Building Research, <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1718> (last visited Nov. 7, 2009).

¹⁰ U.S. Env'tl. Prot. Agency, Green Building: Basic Information, <http://www.epa.gov/greenbuilding/pubs/about.htm> (last visited Nov. 7, 2009).

objectives such as protecting occupant health, improving employee productivity, using energy, water, and other resources more efficiently, and reducing the overall impact on the environment.¹¹

Although there is some controversy about the actual achievement of these benefits,¹² proponents of green buildings allege that they provide environmental benefits including energy consumption reduction; enhancement and protection of ecosystems and biodiversity; improved air and water quality; reduction of solid waste; and conservation of natural resources.¹³ In addition to the environmental benefits, green buildings allegedly “[r]educ[e] operating costs; [e]nhance asset value and profits; [i]mprove employee productivity and satisfaction; [o]ptimize life-cycle economic performance . . . [i]mprove air, thermal, and acoustic environments; [e]nhance occupant comfort and health; [m]inimize strain on local infrastructure; [and] [c]ontribute to overall quality of life.”¹⁴

B. *Types of Green Building Regulations*

According to an American Institute of Architects’ study, state and local regulation and policies in support of green building have exploded since 2003.¹⁵ Since then, the number of counties with green building programs has risen from eight to thirty-nine, an increase of 387.5%.¹⁶ Simultaneously, the federal government has enacted tax incentives to encourage green building practices,¹⁷ regulated the energy efficiency of equipment,¹⁸ and encouraged green building through federal building programs.¹⁹ Most recently, the House of Representatives passed

¹¹ *Id.*

¹² See generally, CONSOL, ACHIEVING 30% AND 50% OVER ASHRAE 90.1-2004 IN A LOW-RISE OFFICE BUILDING (2008), available at <http://www.naiop.org/governmentaffairs/pdf/consol.pdf> (describing a study in which energy-saving green strategies failed to meet their targeted energy-savings over a ten-year period).

¹³ See U.S. Green Bldg. Council, *supra* note 9; U.S. Env’tl. Prot. Agency, *supra* note 10.

¹⁴ U.S. Green Bldg. Council, *supra* note 9.

¹⁵ BROOKS RAINWATER & COOPER MARTIN, LOCAL LEADERS IN SUSTAINABILITY: GREEN COUNTIES 15, available at <http://www.aia.org/advocacy/local/counties/ALAS078508>.

¹⁶ *Id.* at 14–15.

¹⁷ See, e.g., 26 U.S.C. § 45L (2006) (providing an energy efficient home tax credit); 26 U.S.C. § 179D (2006) (providing a commercial energy efficient tax credit).

¹⁸ See, e.g., 26 U.S.C. §§ 6292, 6295 (2006) (creating energy conservation standards for certain consumer products).

¹⁹ See, e.g., U.S. Gen. Serv. Admin., Sustainable Design Program, http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_OVERVIEW&contentId=8154 (last visited

a national energy efficiency building code as a component of the climate change bill currently before Congress.²⁰

There are four major types of green building regulations currently being utilized: 1) government construction regulations; 2) mandatory green building requirements; 3) financial incentives; and 4) non-financial incentives.²¹

1. Government Construction Regulations

Where the state or other government entity acts as a private market participant, its freedom to regulate the terms of its purchases is very broad.²² Some government entities have passed regulations mandating that buildings built by the government entity must meet specific green standards.²³ Others have extended such requirements to space that the government entity rents.²⁴ Some government entities have even extended these requirements to buildings that receive funding from the government entity.²⁵

Nov. 7, 2009) (describing the U.S. General Services Administration's commitment to green building in all its future construction projects).

²⁰ See American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. § 201 (2009); U.S. House of Representatives: Office of the Clerk, Final Vote Results for Roll Call 477, <http://clerk.house.gov/evs/2009/roll477.xml> (last visited Nov. 7, 2009).

²¹ See *infra* Parts I.B.1–4.

²² See S.-Cent. Timber v. Wunnicke, 467 U.S. 82, 93 (1984) (“Our cases make clear that if a State is acting as a market participant, rather than as a market regulator, the dormant Commerce Clause places no limitation on its activities.” (citations omitted)).

²³ See, e.g., U.S. Gen. Serv. Admin., *supra* note 19. The United States General Services Administration (“GSA”) requires the Silver LEED Certified standard for all new federal buildings. *Id.* Denver, Colorado requires that all new city-owned buildings, over a set size, as well as all city-owned buildings undergoing renovations which affect more than twenty-five percent of the building's square footage, to achieve LEED Silver. Mayor John W. Hickenlooper, Exec. Order No. 123 (Oct. 24, 2007), available at <http://www.greenprintdenver.org/docs/CCDXO123.pdf>.

²⁴ See, e.g., Energy Independence and Security Act of 2007, Pub. L. No. 110-140, § 435, 121 Stat. 1492, 1615 (2007) (to be codified at 42 U.S.C. § 17091) (“IN GENERAL.—Except as provided in subsection (b), effective beginning on the date that is 3 years after the date of enactment of this Act [enacted Dec. 19, 2007], no Federal agency shall enter into a contract to lease space in a building that has not earned the Energy Star label in the most recent year.”).

²⁵ Ca. Green Building Action Plan § 1, 1.1, available at <http://www.energy.ca.gov/greenbuilding/index.html> (follow “Green Building Action Plan” hyperlink) (requiring “[a]ll employees and all State entities under the Governor's jurisdiction” to “immediately and expeditiously take all practical and cost-effective measures to implement” a series of green building, and other, goals at all “facilities owned, funded, or leased by the State”).

2. Mandatory Green Building Regulations

Some government entities have also enacted mandatory green building requirements that are much like traditional “command-and-control” environmental regulations, the Clean Water Act²⁶ and the Clean Air Act²⁷ being preeminent examples.²⁸ Some regulations mandate specific green building practices or the achievement of a green building standard, such as LEED.²⁹

Congress is currently debating the merits of a national green building mandate through the imposition of a national energy efficiency building code. In June 2009, the Waxman-Markey Act³⁰ passed the House of Representatives and is now expected to create substantial debate in the Senate.³¹ Section 201 of the Waxman-Markey Act addresses “energy efficiency in building codes.”³² It requires “national energy building codes” to be established “for residential and commercial buildings, sufficient to meet each of the national building code energy efficiency targets.”³³ The energy efficiency targets set by the Waxman-Markey Act set an escalating scale of reductions in energy use.³⁴ “[E]ffective on the date of enactment of the” Waxman-Markey Act, the target is a “30 percent reduction in energy use relative to a comparable building

²⁶ Clean Water Act, 33 U.S.C. §§ 1251–1387 (2006).

²⁷ Clean Air Act, 42 U.S.C. §§ 7401–7647q (2006).

²⁸ Stuart L. Deutsch, *Setting Priorities: Principles to Improve Environmental Policy*, 68 CHI.-KENT L. REV. 43, 45 (1992).

²⁹ See, e.g., BALTIMORE, MD., BUILDING, FIRE, AND RELATED CODES OF BALTIMORE CITY part II, ch. 37, § 3705 (2009) (mandating that all newly budgeted city buildings achieve a LEED certified rating, or its equivalent, in 2009, and a LEED silver rating, or its equivalent, after 2009); WASHINGTON, D.C., CODE §§ 6-1451.02–03 (2009) (mandating various levels of green building for different sized buildings in accordance with various standards including LEED and Energy Star); BOSTON, MASS., ZONING CODE art. 37, § 37-4 (2007) (limiting the ways through which certain projects can earn the points needed to attain a required LEED rating).

³⁰ American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009). The Act is commonly referred to by the names of its sponsors, Representatives Henry Waxman and Edward Markey. See Yale Environment 360, *The Waxman-Markey Bill: A Good Start or a Non-Starter?*, June 18, 2009 <http://e360.yale.edu/content/feature.msp?id=2163>. For the remainder of this article, the Act will be referred to as the “Waxman-Markey Act.”

³¹ Alice LaPlante, *Cost of Reducing CO2 Emissions Could Plunge*, STANFORD GSB NEWS, Oct. 2009, http://www.gsb.stanford.edu/news/research/emissions_electricityprice.html#.

³² H.R. 2454 § 201.

³³ *Id.*

³⁴ *Id.*

constructed in compliance with the baseline code.”³⁵ The next target, “effective January 1, 2014, for residential buildings, and January 1, 2015, for commercial buildings,” is a “50 percent reduction in energy use relative to the baseline code.”³⁶ Between “January 1, 2017, for residential buildings, and January 1, 2018, for commercial buildings,” and January 1, 2029 and 2030, respectively, a “5 percent additional reduction in energy use relative to the baseline code” is targeted for every three year interval in the time period.³⁷ If consensus-based codes provide for greater reductions in energy use than is required under the Waxman-Markey Act, then “the overall percentage reduction in energy use provided by that successor code shall be the national building code energy efficiency target.”³⁸ Finally, the Act requires states and local governments to comply with or exceed the national energy efficiency building code energy efficiency targets, and provide enforcement mechanisms, specifically the withholding of federal funds, for states that are out of compliance.³⁹

A similar, though less stringent, national energy efficiency building code has been proposed in the Senate version of the bill.⁴⁰

3. Financial Incentives

Financial incentives are the third type of green building regulation. Some financial incentives take the form of direct grants from government entities.⁴¹ Others are structured as tax incentives or rebates.⁴² Yet others

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ H.R. 2454 § 201.

³⁹ *Id.*

⁴⁰ See American Clean Energy Leadership Act of 2009, S. 1462, 111th Cong. § 241 (2009). For a synopsis of the Senate bill, see Green Building Law Blog, <http://www.greenbuildinglawblog.com/2009/07/articles/waxmanmarkey-1/american-clean-energy-leadership-acts-national-energy-efficiency-code-easier-on-states/> (Jul. 29, 2009).

⁴¹ See, e.g., 24 PA. STAT. ANN. § 25-2574(c.4) (West Supp. 2009). Pennsylvania provides grants to local school districts for green design and construction costs. *Id.* King County, Washington provides grants for commercial buildings of up to \$25,000 for LEED Gold or \$35,000 for LEED Platinum ratings. King County, Commercial Green Building Incentives, <http://your.kingcounty.gov/solidwaste/greenbuilding/incentives/commercial.asp> (last visited Nov. 7, 2009).

⁴² For example, Arizona provides a personal income tax deduction equal to five percent of the sale price of a home that saves energy in excess of Arizona's “1995 Model Energy Code” by at least fifty percent. ARIZ. REV. STAT. ANN. §43-1031 (2009). Under certain

are rebates of the typical government-related costs of building, such as permit fees.⁴³

4. Non-Financial Incentives

The fourth type of green building legislation involves non-financial incentives. Non-financial incentives should be attractive to municipalities because they do not deplete public finances directly and should, therefore, be easier to pass in difficult financial times or with reluctant constituencies. There is some evidence that developers may value non-monetary incentives as much or more than monetary ones.⁴⁴

conditions, Cincinnati provides property tax abatements of up to 100% for some LEED rated buildings. Cincinnati, Ohio, Ordinance 446-2007 § 2 (Dec. 12, 2007).

⁴³ See, e.g., MECKLENBURG COUNTY, N.C., LAND USE AND ENVIRONMENTAL SERVICES FEE ORDINANCE § 2(D)(54) (2009). The Mecklenburg County Green Permit Rebate Program provides building permit fee rebates of: ten percent, to a maximum of \$50,000, for LEED certified or one Green Globe projects; fifteen percent, up to \$60,000, for LEED Silver or two Green Globes projects; twenty percent, up to \$75,000, for LEED Gold or three Green Globes projects; and, twenty-five percent, up to \$100,000, for LEED Platinum or four Green Globes projects. *Id.* The Census Bureau reports that Mecklenburg County issued 8,473 single-family building permits in 2005. U.S. CENSUS BUREAU, ANNUAL NEW PRIVATELY-OWNED RESIDENTIAL BUILDING PERMITS: MECKLENBURG COUNTY, N.C. (2005), available at <http://censtats.census.gov/bldg/bldgprmt.shtml> (select "County" and "North Carolina"; click submit; then select "Mecklenburg County" and click submit). The average construction cost of each residence was \$144,087. *Id.*

The City of Asheville rebates a portion of building permit and plan review fees for certain renewable energy technologies and green building certifications for homes. See City of Asheville Bldg. Safety Dep't, Permit Fee Schedule (July 1, 2009), available at <http://www.ashevillenc.gov/uploadedfiles/departments/finance/fees/permitting%20fees.pdf>. Rebates are offered for fees related to: Energy Star Home designation, "Healthy Built Home" designation, and the installation of: geothermal heat pumps, wind turbines, solar-energy systems, and gray-water collection and reuse systems. *Id.* Asheville also reduces plan review fees by fifty percent for any building that is seeking LEED certification. *Id.* The plan review fees range from \$75, for a plans costing up to \$5000, and to more than \$6000, for plans costing over \$5 million. *Id.*

In implementing these measures, both Asheville and Mecklenburg County acted under authority granted by the North Carolina legislature. See N.C. Gen. Stat. §§ 153A-340(i), 160A-381(f) (2009).

⁴⁴ YUDELSON ASSOCS., GREEN BUILDING INCENTIVES THAT WORK: A LOOK AT HOW LOCAL GOVERNMENTS ARE INCENTIVIZING GREEN DEVELOPMENT 12 (Nat'l Ass'n of Indus. and Office Props. 2007), available at <http://www.naiop.org/foundation/greenincentives.pdf>. "Of the nine most frequent incentives for green buildings, energy efficiency, and renewable energy, two-thirds represent some form of monetary inducement." *Id.* A survey of developers, however, found that they valued "faster time[s] to market, more certainty in the development approval process, and additional flexibility to add more space" as much or more than monetary incentives. *Id.*

Examples of non-financial incentives for green buildings include increased floor-to-area ratios⁴⁵ and expedited permitting processes.⁴⁶

⁴⁵ See, e.g., ASHLAND, OR., MUNICIPAL CODE tit. 18, ch. 88, § 18.88.040(B). Ashland, Oregon allows developers to increase project density of units per acre up to fifteen percent if all the units in the project meet the minimum "Earth Advantage [H]ome" requirements. *Id.* Earth Advantage is a non-profit Northwest green building certification program. Earth Advantage, About Earth Advantage, <http://www.earthadvantage.com/about.php> (last visited Nov. 7, 2009). Earth Advantage Homes must be fifteen percent more efficient than conventional homes. Earth Advantage, What Makes a Home Earth Advantage?, <http://www.earthadvantage.com/what-makes.php> (last visited Nov. 7, 2009). Energy Advantage Homes use energy efficient appliances and seek to improve indoor air quality. *Id.* Arlington County, Virginia implemented its Green Building Incentive Program in April 2000, updated and expanded it in 2003, and revised it again in March 2009. Arlington, Virginia, Green Building Incentive Program, <http://www.arlingtonva.us/DEPARTMENTS/EnvironmentalServices/epo/EnvironmentalServicesEpoGreenBuildings.aspx> (last visited Nov. 7, 2009). Achieving a LEED certification rating does not guarantee a density bonus, rather, projects are considered on a case-by-case basis. *Id.* Residential buildings achieving LEED certified rating can potentially earn a bonus of up to .1 floor area ratio ("FAR"). *Id.* Residential buildings achieving: LEED silver are eligible for a bonus of up to .2 FAR; LEED gold are eligible for a bonus of up to .4 FAR; and, LEED platinum are eligible for a bonus of up to .5 FAR. *Id.* In addition to, or in place of FAR bonuses, residential buildings meeting or exceeding the LEED certified level are eligible for a potential three story increase in permissible height. *Id.* FAR bonuses are .05 less at each LEED level, as compared to residential buildings, for office buildings. *Id.* Similarly, Seattle, Washington enacted new regulations providing greater heights and or maximum floor areas for commercial and residential buildings that achieve a LEED silver rating and meet certain other requirements. Seattle, Washington Dep't of Planning and Dev., City Green Building: Development Incentives, <http://www.seattle.gov/dpd/GreenBuilding/OurProgram/PublicPolicyInitiatives/DevelopmentIncentives/default.asp> (last visited Nov. 7, 2009).

⁴⁶ See, e.g., HAW. REV. STAT. ANN. § 46-19.6(a) (LexisNexis 2009). Hawaii state law mandates that each county establish priority processing, at no extra charge, of permit applications for construction projects incorporating "energy and environmental design building standards". *Id.* The "energy and environmental design building standards" can be met by earning either a LEED silver rating, a two Green Globes rating, or "other comparable state-approved, nationally recognized, and consensus-based guideline, standard, or system." *Id.* § 46-19.6(b). Chicago's "Green Permit Program" was developed by the Chicago Department of Buildings. CHICAGO DEPT OF BLDGS., GREEN PERMIT PROGRAM 3, available at http://www.cityofchicago.org:80/webportal/COCWebPortal/COC_EDITORIAL/GreenPermitBrochure_1.pdf. Accepted projects can receive permits in less than thirty business days and as few as fifteen. *Id.* Also, projects that meet more stringent sustainability guidelines may qualify for a waiver of "consultant code review fees." *Id.* To qualify for the program's benefits, commercial projects must attempt to meet various LEED ratings. *Id.* at 5. Small residential projects must meet the requirements of the two-star level of the "Chicago Green Homes Program." *Id.* at 5-6.

Miami-Dade County, Florida passed an ordinance in June 2005 to expedite the permitting process for "green" buildings certified by a recognized environmental rating agency. MIAMI-DADE COUNTY, FLA., MUNICIPAL CODE ch. 8, art. I, § 8-6 (2009). Recognized environmental rating agencies include "the Florida Green Building Coalition, the National Home

In short, there has been active experimentation with green building regulation and incentives at every level of government. Given the enormous impact of buildings on both the environment and climate change,⁴⁷ this is not surprising. Little attention, however, has been devoted to analyzing which approach is most effective, or which government entity is best equipped, from a legal and practical standpoint, to implement effective regulations.

II. FEDERALISM CONSIDERATIONS IN GREEN BUILDING REGULATION

There has always been conflict over the scope of the regulatory authority of the federal government versus that of the state governments.⁴⁸ The Constitution established various mechanisms for determining the scope and extent of each level of governmental authority.⁴⁹ With state governments, local governments, and now the federal government seeking to regulate green buildings, federalism conflicts were swift to arrive. For example, arguing that the local government's authority to regulate was preempted by Congressional action, the Air Conditioning, Heating, and Refrigeration Institute and other heating, ventilation, air conditioning, and water heating equipment trade organizations, contractors, and distributors sued the City of Albuquerque in federal district court to stop components of the city's high performance building code from taking effect.⁵⁰ Constitutional federalism considerations, including federal

Builder Association and the U.S. Green Building Council." *Id.* Commercial, industrial, and residential projects are all eligible as long as they are located in the incorporated or unincorporated Miami-Dade County. *Id.* §§ 8-1, 8-6.

⁴⁷ See MARILYN A. BROWN, FRANK SOUTHWORTH & THERESE K. STOVALL, TOWARDS A CLIMATE-FRIENDLY BUILT ENVIRONMENT 1 (Pew Ctr. on Global Climate Change 2005), available at http://www.pewclimate.org/docUploads/Buildings_FINAL.pdf.

⁴⁸ Compare, e.g., THE FEDERALIST No. 32, *supra* note 1 (arguing that the states would retain much of their power under the Constitution) with GEORGE MASON, OBJECTIONS TO THE CONSTITUTION OF GOVERNMENT FORMED BY THE CONVENTION (1787), in THE ESSENTIAL FEDERALIST AND ANTI-FEDERALIST PAPERS 1-3 (David Wootton ed., 2003) (arguing that the states would be dominated by the federal government under the Constitution).

⁴⁹ See, e.g., U.S. CONST. art. 1, § 3, cl. 1 (providing for appointment of senators by state legislatures); *id.* art. 1, § 8 (enumerating congressional powers); *id.* art. I, § 10 (setting forth actions forbidden to the states); *id.* art. II § 1 (providing that state-appointed electors choose the president); *id.* art. V (requiring state approval of constitutional amendments); *id.* art. VI, § 2 (providing that federal law "shall be the supreme Law of the Land"); *id.* amend. X (reserving to the states, or the people, powers not delegated to the federal government).

⁵⁰ Air Conditioning, Heating, and Refrigeration Inst. (*A.H.R.I.*) v. City of Albuquerque, No. 08-633 MV/RLP, 2008 U.S. Dist. LEXIS 106706, at *2 (D.N.M. Oct. 3, 2008). *A.H.R.I.* was filed in federal district court for the District of New Mexico. *Id.* at *1. The plaintiffs

preemption, state preemption, and Commerce Clause restrictions, all impact green building regulation.

A. *Federal Preemption*

Article VI of the Constitution established the supremacy of federal laws over conflicting state laws. The Supremacy Clause provides:

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.⁵¹

Thus, conflicting state laws are preempted by federal action in a given regulatory arena.⁵² Two types of preemption, express preemption and implied preemption, affect green building. Express preemption exists where Congress explicitly states its intention to prohibit states from regulating a particular area.⁵³ The only legal question that remains when Congress expressly preempts state regulation is whether the challenged state law is one that the federal law is intended to preempt.⁵⁴ Implied preemption exists where the federal government dominates the field of regulation, where Congress has left "no room" for state regulation.⁵⁵ In a case of implied preemption, the courts look to several factors, including: the extent of the federal regulatory scheme, the importance of the federal interest, and the potential frustration of federal goals in determining whether a state law is preempted.⁵⁶

included the Air Conditioning, Heating, and Refrigeration Institute ("A.H.R.I."), two additional national industry groups, and eleven distributors and contractors of heating, ventilation, and air conditioning ("HVAC") products and water heaters. *Id.* at *1-2.

⁵¹ U.S. CONST. art VI.

⁵² *See id.*

⁵³ CHRISTOPHER R. DRAHOZAL, *THE SUPREMACY CLAUSE: A REFERENCE GUIDE TO THE UNITED STATES CONSTITUTION* 96-97 (2004).

⁵⁴ *See id.* at 97-99; *see also* *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 484-86 (1996).

⁵⁵ *See* *Pennsylvania v. Nelson*, 350 U.S. 497, 504 (1956); *see also* DRAHOZAL, *supra* note 53, at 101.

⁵⁶ *Nelson*, 350 U.S. at 502, 504-05.

A case of direct preemption has already emerged in the green building field. On August 29, 2008, the Air Conditioning, Heating, and Refrigeration Institute and other HVAC and water heating equipment trade organizations, contractors, and distributors (collectively "A.H.R.I.") filed for an injunction in federal district court against the City of Albuquerque in order to stop components of the city's high performance building code from taking effect.⁵⁷

A.H.R.I. argued that the Energy Policy and Conservation Act of 1975 ("EPCA"),⁵⁸ as amended by the National Appliance Energy Conservation Act of 1987 ("NAECA")⁵⁹ and the Energy Policy Act of 1992 ("EPACT")⁶⁰ preempted the building code's provisions related to energy efficiency of HVAC products.⁶¹ Together, these laws establish nationwide standards for the performance of HVAC equipment, and contain a preemption provision that "prohibits state regulation 'concerning' the energy efficiency, energy use, or water use of any covered product with limited exceptions."⁶²

The Albuquerque Energy Conservation Code ("Code") was part of the City's attempt to significantly reduce carbon dioxide and greenhouse gas emissions.⁶³ The Code consisted of two volumes. Volume I applied to new construction, additions, or renovations of commercial and multi-family residential buildings.⁶⁴ Volume II applied to new construction, additions, or renovations of "one- and two-family detached dwellings and townhouses."⁶⁵

Both volumes provided a menu of options for reduction of energy use. In relevant part, Volume I of the Code offered two options: a "Simplified Approach Option,"⁶⁶ which mandated the energy efficiency of each building component;⁶⁷ and a "Performance Rating Method,"⁶⁸ which

⁵⁷ Air Conditioning, Heating, and Refrigeration Inst. (*A.H.R.I.*) v. City of Albuquerque, No. 08-633 MV/RLP, 2008 U.S. Dist. LEXIS 106706, at *1-2 (D.N.M. Oct. 3, 2008).

⁵⁸ 42 U.S.C. §§ 6201-6422 (2006).

⁵⁹ National Appliance Energy Conservation Act of 1987, Pub. L. No. 100-12, 101 Stat. 103 (1987).

⁶⁰ Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992).

⁶¹ *A.H.R.I.*, 2008 U.S. Dist. LEXIS 106706, at *2.

⁶² *Id.* at *3 (quoting 42 U.S.C. § 6297(c)).

⁶³ ALBUQUERQUE, N.M., ENERGY CONSERVATION CODE vol. 1, Preface (2007), available at <http://www.cabq.gov/albuquerquegreen/pdf/volumeI.pdf>.

⁶⁴ *Id.* §§ 2.1, 4.1.1.1 to 7.

⁶⁵ ALBUQUERQUE, N.M., ENERGY CONSERVATION CODE vol. 2, ch. 1 §§ 101.2 to .3, 101.7.1 to .6 (2007), available at <http://www.cabq.gov/albuquerquegreen/pdf/volumeII.pdf>.

⁶⁶ ALBUQUERQUE, N.M., ENERGY CONSERVATION CODE vol. 1, § 10.2.2 (2007).

⁶⁷ See *id.* § 5.3 (building envelope); *id.* § 6.3 (HVAC system); *id.* § 7.3 (service water heating); *id.* § 9.3 (lighting).

⁶⁸ *Id.* § 10.2.3.

allowed compliance with the Code by the proposed building being thirty percent more energy efficient than a baseline building that met ASHRAE⁶⁹ 90.1-1999 standards.⁷⁰ Volume II offered three options:⁷¹ compliance with certain prescriptive temporary provisions, such as requiring seventy percent of lighting to be through Energy Star lighting;⁷² compliance with the 2006 International Energy Conservation Code;⁷³ or, achieving thirty percent increased energy efficiency over a baseline residence in compliance with the 2003 International Energy Conservation Code.⁷⁴ In both volumes, at least one of the options required energy efficiency requirements for air conditioners, furnaces, heat pumps, and water heaters that were more stringent than those required by EPCA, as amended.⁷⁵

A.H.R.I. argued that the Code's regulations would preclude them from "selling noncompliant HVAC and water heating products" in Albuquerque.⁷⁶ Additionally, the Code would cause equipment costs to increase and, thereby, induce consumers to repair, rather than replace, their products.⁷⁷ Furthermore, new home costs may have increased due to the increased equipment costs, and, thus, have impacted new home sales.⁷⁸ Finally, A.R.H.I. argued that the Code would precipitate confusion with regards to the standards by which "manufacturers, distributors and contractors" were to abide.⁷⁹

On October 3, 2008, Chief District Court Judge Martha Vazquez not only granted the preliminary injunction, but laid out her opinion that the Albuquerque Code was indeed preempted.⁸⁰ After analyzing the particular provisions, Judge Vazquez concluded that "[t]here is no doubt that

⁶⁹ ASHRAE is the American Society of Heating, Refrigerating, and Air-Conditioning Engineers. ASHRAE, <http://www.ashrae.org/> (last visited Nov. 7, 2009).

⁷⁰ ALBUQUERQUE, N.M., ENERGY CONSERVATION CODE vol. 1, § 5.5 (building envelope); *id.* § 6.5 (HVAC); *id.* § 7.5 (service water heating); *id.* § 9.5 (lighting).

⁷¹ ALBUQUERQUE, N.M., ENERGY CONSERVATION CODE vol. 2, ch. 4, § 401.1 (2007).

⁷² *Id.* § 403.10 (2007).

⁷³ *Id.* § 404.

⁷⁴ *Id.* § 405.3.

⁷⁵ Air Conditioning, Heating, and Refrigeration Inst. (A.H.R.I.) v. City of Albuquerque, No. 08-633 MV/RLP, 2008 U.S. Dist. LEXIS 106706, at *8-9 (D.N.M. Oct. 3, 2008). *See also* Complaint for Declaratory and Injunctive Relief at 17-20, A.H.R.I., 2008 U.S. Dist. LEXIS 106706 (describing specific requirements A.H.R.I., felt exceeded federal requirements).

⁷⁶ Shari Shapiro, *Open the Floodgates: The Era of Green Building Litigation*, HVAC WEB CONNECTION, <http://www.hvacwebconnection.com/hvacarticles/environmentallitigation.htm> (last visited Nov. 7, 2009).

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ A.H.R.I., 2008 U.S. Dist. LEXIS 106706, at *37-38.

Congress intended to preempt state regulation of the energy efficiency of certain building appliances in order to have uniform, express, national energy efficiency standards.”⁸¹ In addition, the Court noted that “[a]t the time the Code was drafted, the Green Building Manager, by his own admission, was unaware of federal statutes governing the energy efficiency of HVAC products and water heaters and the City attorneys who reviewed the Code did not raise the preemption issue.”⁸²

Although the *A.H.R.I.* case presents an example of express federal preemption, the case could easily have been subject to an implied preemption analysis if the EPCA did not contain express preemption provisions⁸³—posing a harder case for Judge Vazquez. If the EPCA had simply regulated the energy efficiency of heating and air conditioning equipment, Judge Vazquez would have had to determine if Congress intended to dominate the field with its regulation.⁸⁴ As federal regulation of the components of green buildings, like energy efficiency, water, and so forth, become more pervasive, the courts will doubtless be increasingly called on to make this type of determination.

B. State Preemption

In addition to federal preemption, another layer of intergovernmental conflict impacts green building regulation—state preemption. State preemption works like federal preemption, except that the regulatory authority of local governments is constrained by regulation taken at the state level.⁸⁵

A great example of the impact of state preemption on green building regulation comes from the Commonwealth of Pennsylvania. In 2004, Pennsylvania adopted a Uniform Construction Code (“UCC”)⁸⁶ as the common building code for all municipalities in Pennsylvania.⁸⁷ The UCC, in

⁸¹ *Id.* at *20.

⁸² *Id.* at *5.

⁸³ See *supra* notes 52–56 and accompanying text.

⁸⁴ See *supra* notes 55–56 and accompanying text.

⁸⁵ Compare 63 C.J.S. *Municipal Corporations* § 141 (1999) (discussing state preemption and noting that state law generally preempts municipal law when the laws conflict or when the state legislature intends to occupy the field), with *supra* notes 52–56 and accompanying text (describing federal preemption analysis).

⁸⁶ Legislation was passed adopting the UCC in 1999, 35 PA. STAT. ANN. § 7210.301 (West 2003 & Supp. 2009), but enforcement did not begin until April 2004, Pennsylvania Dep’t of Labor and Indus., Building Codes, <http://www.dli.state.pa.us/landi/cwp/view.asp?a=310&q=210892> (last visited Nov. 7, 2009).

⁸⁷ § 7210.301(d)(1).

itself, does not prevent local governments from passing green building regulations related to the building code as long as: the requirements are equal to or more stringent than the UCC; the local government secures approval from Pennsylvania's Department of Labor and Industry; and the local government provides appropriate public notice.⁸⁸

Pennsylvania's Department of Labor and Industry evaluates proposed changes based on the following criteria:

- (i) that certain clear and convincing local climatic, geologic, topographic or public health and safety circumstances or conditions justify the exception;
- (ii) the exception shall be adequate for the purpose intended and shall meet a standard of performance equal to or greater than that prescribed by the Uniform Construction Code;
- (iii) the exception would not diminish or threaten the health, safety and welfare of the public; and
- (iv) the exception would not be inconsistent with the legislative findings and purpose described in section 102.⁸⁹

In *Schuylkill Township v. Pennsylvania Builders Ass'n*, the Commonwealth Court held that townships must prove that "conditions there were so different from the statewide norm that the uniform standards were not appropriate to use in the Township" in order to satisfy the "clear and convincing" standard for an exception to the UCC.⁹⁰ This case is on appeal to the Pennsylvania Supreme Court to determine whether the Pennsylvania law implementing the UCC "requires a municipality to prove that there are unusual local circumstances or conditions atypical of other municipalities that would justify" an exception to the UCC.⁹¹

If the Supreme Court determines that atypicality is required, local governments would have a very difficult time passing green building standards which required building practices different from those in the UCC due to the difficulty of arguing that the benefits of green building are any different in one township than any other in Pennsylvania. The UCC would

⁸⁸ § 7210.503(b)-(i); see also 34 PA. CODE § 403.102(i)-(j) (2009) (describing the departmental approval process).

⁸⁹ 35 PA. STAT. ANN. § 7210.503 (j)(2)(i)-(iv) (West Supp. 2009).

⁹⁰ *Schuylkill Twp. v. Pa. Builders Ass'n*, 935 A.2d 575, 583 (Pa. Commw. Ct. 2007) (quoting and construing § 7210.503(j)(2)(i), *appeal granted*, 947 A.2d 714 (Pa. 2008)).

⁹¹ *Schuylkill Twp. v. Pa. Builders Ass'n*, 947 A.2d 714, 714 (Pa. 2008) (per curiam) (granting Schuylkill's Petition for Allowance of Appeal from *Schuylkill Twp. v. Pa. Builders Ass'n*, 935 A.2d 575 (Pa. Commw. Ct. 2007)).

essentially have preempted the local governments from developing independent green building requirements.

C. Commerce Clause

In addition to the Supremacy Clause, the Commerce Clause also poses significant federalism concerns for green building regulation. The Commerce Clause states that “[t]he Congress shall have Power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.”⁹²

As with the Supremacy Clause,⁹³ the Commerce Clause established the supreme authority of the federal government to control regulation of commerce “among the several States.”⁹⁴ Over the past two hundred years, the Courts have created a complex jurisprudence to determine the extent and nature of states’ authority to regulate commerce when it impacts interstate commerce.⁹⁵

Most broadly, the current jurisprudential position has three basic tenets. First, where a state attempts to discriminate against interstate commerce, the law is *per se* unconstitutional.⁹⁶ Second, where a state acts as a market participant—for example, by sourcing exclusively in-state materials for its own construction projects—the regulation is not restricted by the Commerce Clause.⁹⁷ Finally, the remaining cases are judged under a balancing test that seeks to balance legitimate state interests with those of protecting interstate commerce.⁹⁸

Green building regulations can run afoul of the Commerce Clause very readily. For example, the *A.H.R.I.* plaintiffs specifically alleged that the Albuquerque green building regulations violated the Commerce Clause.⁹⁹ They claimed that:

⁹² U.S. CONST. art. I, § 8, cl. 3.

⁹³ See *supra* Part II.A.

⁹⁴ See U.S. CONST. art. I, § 8, cl. 3.

⁹⁵ See generally JOHN E. NOVAK & RONALD D. ROTUNDA, CONSTITUTIONAL LAW 319–73 (7th ed. 2004) (discussing Commerce Clause restrictions on state powers).

⁹⁶ See *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt.*, 550 U.S. 330, 338 (2007) (“[D]iscriminatory laws motivated by simple economic protectionism are subject to a ‘virtually *per se* rule of invalidity’ . . .”) (quoting *Philadelphia v. New Jersey*, 437 U.S. 617, 624 (1978)).

⁹⁷ See *S.-Cent. Timber Dev. Inc. v. Wunnicke*, 467 U.S. 82, 93 (1984) (“Our cases make clear that, if a State is acting as a market participant, rather than as a market regulator, the dormant Commerce Clause places no limitation on its activities.” (citations omitted)).

⁹⁸ See, e.g., *United Haulers Ass’n*, 550 U.S. at 346 (explaining that local laws addressing legitimate local concerns are valid, provided they do not unduly burden interstate commerce).

⁹⁹ Complaint for Declaratory and Injunctive Relief, *supra* note 75, at 27.

[d]istributors and [c]ontractors in nearby cities and States which [had] not adopted the same regulatory provisions challenged in [the] action [would] not suffer the same or similar adverse effects on their business, nor [would] distributors in any other city or State which [had] not adopted those same regulatory provisions. Those effects place[d] the distributor Plaintiffs and all other Albuquerque distributors within a uniquely affected class harmed by the regulatory provisions challenged in [the] action.¹⁰⁰

A hypothetical example could emerge with the sourcing of locally produced materials. Many of the green building rating systems include locally produced materials as a component of determining the "green-ness" of the building, as such materials require fewer resources to transport.¹⁰¹ If a green building regulation required in-state sourcing for private projects, it would likely be considered discriminatory against out-of-state market participants, and therefore in violation of the Commerce Clause.

When higher levels of government act to regulate, as in the case of the EPCA¹⁰² or the Pennsylvania UCC,¹⁰³ lower levels of government can be constrained in their ability to regulate, and face stiff Constitutional challenges.¹⁰⁴ With the many, often conflicting, priorities of the federal government, however, it is often desirable for states and localities to act.¹⁰⁵ As with any federalist system, there is no perfect solution. Therefore, it is critical to analyze the pros and cons of regulation of green buildings at the federal, state, and local levels, and to determine which regulatory authority, or combination of authorities, will be able to regulate green buildings most effectively. This analysis is the subject of the remainder of the article.

¹⁰⁰ *Id.* at 7.

¹⁰¹ *See, e.g.*, U.S. GREEN BLDG. COUNCIL, LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATIONS 53 (2008), available at <http://www.usgbc.org/ShowFile.aspx?DocumentID=5546>.

¹⁰² *See supra* notes 50–84 and accompanying text.

¹⁰³ *See supra* Part II.B.

¹⁰⁴ *See, e.g., supra* notes 50–84 and accompanying text (discussing Albuquerque, New Mexico's efforts to impose strict energy standards and the resulting constitutional challenge).

¹⁰⁵ Indeed, due to the long delay by the federal government in acting to regulate climate change, many states and localities took on the burden of acting. *See* Jared Snyder & Jonathan Binder, *The Changing Climate of Cooperative Federalism: The Dynamic Role of the States in a National Strategy to Combat Climate Change*, 27 UCLA J. ENVTL. L. & POL'Y 231, 231 (2009).

III. IMPERFECT SOLUTIONS—EXCLUSIVE STATE OR FEDERAL REGULATION OF GREEN BUILDINGS

A. *State and Local Regulation of Green Buildings*

Since the beginning of the administration of President George W. Bush, local and state governments have become increasingly responsible for environmental regulations.¹⁰⁶ The cross-border effects of environmental damage have triggered federal environmental regulations.¹⁰⁷ During the 1970s and 1980s, the federal government began to adopt environmental regulations in response to the increasing cross-border effects of toxic sites and pollution.¹⁰⁸

The lack of federal action on global warming¹⁰⁹ has created a well-spring of creative legal experimentation in regulating green buildings, from creative incentive programs to strict state-wide green building codes.¹¹⁰ It has been a classic case study in states as “laboratories of democracy.”¹¹¹

There are several benefits to state and local regulation of green buildings. The primary advantage is that, historically, building regulations have been a local concern.¹¹² Building codes are developed at the state or local level, with huge variability from state to state and even within states.¹¹³ Part of the reason for this local control is the variability among localities—building regulations which apply in earthquake-prone areas, like California, would probably be inappropriate for flood prone regions of the Midwestern states. Another basis for local land use regulation is the intimacy of the regulation.¹¹⁴ Because people’s homes, businesses and

¹⁰⁶ *Id.* at 246.

¹⁰⁷ See Richard J. Lazarus, Essay, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law’s First Three Decades in the United States*, 20 VA. ENVTL. L.J. 75, 102 (2001).

¹⁰⁸ See generally *id.* at 76–89, 102 (describing the history of environmental law in the 1970s and 1980s).

¹⁰⁹ See Snyder & Binder, *supra* note 105, at 246.

¹¹⁰ See *supra* Part I.B.

¹¹¹ See *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (explaining that the federal system allows states to “serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”).

¹¹² See Katherine A. Trisolini, *What Local Climate Change Plans Can Teach Us About City Power*, 36 FORDHAM URB. L.J. 863, 867 n.81 (2009).

¹¹³ *Id.*

¹¹⁴ Cf. Kathryn E. Kovacs, *Accepting the Relegation of Takings Claims to State Courts: The Federal Courts’ Misguided Attempts to Avoid Preclusion Under Williamson County*,

communities are directly impacted by building regulations, access to the levers of power which influence these regulations has been seen as critical.¹¹⁵ Finally, because of the history of local control of building regulation, every state and community with a building code has an enforcement mechanism already in place.

In addition to the history of land use regulation, there are potential regulatory advantages to local control of green building regulations. First, states and localities have already begun passing and implementing green building regulations.¹¹⁶ Implementing a federal green building standard might retard those programs already in place. Second, because coalitions should be easier and less expensive to develop at the state and local levels of government, it may be easier to pass green building regulations with more stringent environmental standards, thereby achieving greater reductions in natural resource consumption.

State and local regulation of green buildings is not without its drawbacks, however. A primary issue is simply lack of will to regulate; for example, as of the publication of this article, thirteen states have no state-wide commercial building code, or have not updated their code within the last ten years,¹¹⁷ and eleven states have no statewide residential building code, or have not updated their code within the last ten years.¹¹⁸ Indeed, a patchwork of state or local regulations could lead to a "race to the bottom" where states and localities seeking additional development implement more lax green building regulations (or none at all).¹¹⁹ This is particularly troubling in an economic moment which has seen a virtual standstill in new residential and commercial development.¹²⁰

26 ECOLOGY L.Q. 1, 45 (1999) (quoting *Gardner v. City of Baltimore Mayor and City Council*, 969 F.2d 63, 68 (4th Cir. 1992)) (discussing the possibility that state courts may be best suited to address takings claims, in part because the application of the rules most affects the local community).

¹¹⁵ See generally Frank B. Cross, *The Folly of Federalism*, 24 CARDOZO L. REV. 1, 20–22 (2003) (describing and critiquing arguments in support of decentralization).

¹¹⁶ See *supra* Parts I.B.3–4.

¹¹⁷ Building Codes Assistance Project, Code Status: Commercial, <http://bcap-energy.org/node/21> (last visited Nov. 7, 2009).

¹¹⁸ Building Codes Assistance Project, Code Status: Residential, <http://bcap-energy.org/node/123> (last visited Nov. 7, 2009).

¹¹⁹ See RHYS JENKINS ET AL., ENVIRONMENTAL REGULATION IN THE NEW GLOBAL ECONOMY: THE IMPACT ON INDUSTRY AND COMPETITIVENESS 294–95 (2002).

¹²⁰ See, e.g., Cody Lyon, *Pinsky Stays Upbeat Despite Construction Slump*, GLOBEST.COM, Oct. 22, 2009, http://www.globest.com/news/1522_1522/newyork/181762-1.html# (indicating that construction spending in New York City is likely to fall by twenty percent in 2009).

B. Federal Regulation of Green Buildings

The inherent problems with state and local regulation of environmental concerns was essentially what led to the first wave of environmental regulations in the early 1970s.¹²¹ Federal regulation of environmental issues, including green building regulations, has some major advantages. First and foremost is national uniformity. Cross-border issues are eliminated if everyone must adhere to the same standards. States and localities which have, thus far, failed to regulate the built environment would be forced to regulate. Another potential benefit is cost reduction—if standards are nationally uniform, producers of green building materials need only design products to a single set of requirements. The federal government, however, has many priorities. Strict regulation of buildings may give way to other considerations. In addition, national interest groups have greater sway at the national level than at the state and local levels. For example, section 201 of the Waxman-Markey Act calls for the development and adoption by state and local governments of a national energy efficiency building code.¹²² Already, national organizations such as the National Association of Home Builders (“NAHB”)¹²³ and the International Council of Shopping Centers (“ICSC”)¹²⁴ have begun lobbying nationally against such a requirement.¹²⁵ Due to conflicting priorities and strong interest groups, the

¹²¹ See John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 MD. L. REV. 1183, 1192–193 (1995).

¹²² American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. § 201 (2009).

¹²³ See, e.g., Press Release, Nat’l Ass’n of Home Builders, H.R. 2998 Not the Answer to Secure Energy Future (June 29, 2009), available at http://www.nahb.org/news_details.aspx?sectionID=122&newsID=9401 (addressing another version of the Waxman-Markey Act).

¹²⁴ See, e.g., Letter from Kent Jeffreys, ICSC Staff Vice President of Global Public Policy, to “ICSC Member[s],” available at <http://sullivankreiss.wordpress.com/2009/07/07/icsc-opposes-cap-trade-bill/>.

¹²⁵ According to the NAHB, requiring increased energy efficiency will have catastrophic effects on affordable housing. The NAHB suggests that “[t]he market is not geared up to supply the necessary materials and equipment, and that’s going to drive up costs. The result will be fewer working-class families in these new energy-efficient homes. They’ll be relegated to older, less efficient housing stock and face ever higher utility bills.” Nat’l Ass’n of Home Builders, *supra* note 123. In addition, a national energy efficiency building code would apparently impede regional sustainability considerations. Specifically, “Usurping states’ rights to determine appropriate building efficiency for homes and buildings within their jurisdiction would result in ineffective application of efficiency standards to address varying climate zones and specific needs . . .” Nat’l Ass’n of Home Builders, House Votes to Preempt National Builders Code Process, Nation’s Building News, <http://www.nbnnews.com/NBN/issues/2009-06-29/Politics+&+Government/index.html> (last visited Nov. 7, 2009).

regulations that are ultimately passed may be weaker than those implemented by individual states. Finally, because building regulation has historically been a state and local concern,¹²⁶ the Federal government does not currently have an administration in place to implement national green building regulations.

IV. COOPERATIVE FEDERALISM IN REGULATION OF GREEN BUILDINGS

In their article *Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework is Useful For Addressing Global Warming*, Holly Doremus and W. Michael Hanemann succinctly describe the Cooperative Federalism approach of the Clean Air Act:

The National Ambient Air Quality Standards (NAAQS) are the heart of the Clean Air Act. Section 108 directs EPA to create a list of "criteria pollutants," defined as those air pollutants that are emitted from numerous or diverse sources and cause or contribute to air pollution that may reasonably be anticipated to endanger the public health or welfare. For each pollutant in this category, EPA must set primary and secondary NAAQS, that is, air quality levels that must be achieved nationwide. Primary NAAQS are set at a level "requisite to protect the public health with an adequate margin of safety," while secondary NAAQS are set at a level sufficient to protect public welfare. Costs may not be considered in setting the NAAQS.

Once EPA sets the NAAQS, states draft State Implementation Plans (SIPs) to achieve them. The SIP program leaves many key policy choices to the states, but

The ICSC sent a letter to its nationwide membership warning of the dangers of a national energy efficiency building code claiming that:

The cost and complexity of this federal takeover of state and local building codes forced ICSC to oppose the overall bill. The specific efficiency targets are too aggressive and the deadlines are too short. In addition, there is no trained inspection force to oversee a national building code, so it will require the federal government to retrain state employees and, no doubt, hire a huge number of new inspectors. Supporters of this new federal program simply refused to negotiate or compromise on the language. As a result, ICSC does not support this provision.

Letter from Kent Jeffreys, *supra* note 124.

¹²⁶ See Trisolini, *supra* note 112, at 867 n.81.

also provides considerable federal oversight. In formulating the SIPs, states must provide opportunities for public participation. The process begins with a statewide inventory of emission sources, including both mobile and stationary sources. If portions of the state exceed the NAAQS, the state must then determine the level of emission reduction necessary, a process that requires complex modeling for localized pollutants. Next, the state decides what reductions to make and where to achieve the NAAQS. Finally, it decides on a suite of control measures, which may include a mix of regulations and incentives for voluntary measures, that will deliver those reductions. To ensure that the plans will actually be carried out, the Clean Air Act requires that they include monitoring and enforcement programs, and that the states demonstrate that they have adequate personnel, funding, and legal authority to put them into effect. The completed SIP is submitted to EPA for approval. Once approved it becomes enforceable as a matter of federal, as well as state, law. Recognizing that both technology and knowledge are likely to advance over time, Congress required that states periodically revise their SIPs.¹²⁷

If the EPA determines a SIP would not meet the NAAQS, the EPA must reject it.¹²⁸ Should a state fail to repair the SIP's defect, federal highway funds may be withdrawn as a penalty.¹²⁹ Additionally, a two-to-one offset for any new stationary sources may be imposed.¹³⁰ If, after imposing penalties, the state still does not generate an acceptable SIP, the Federal Implementation Plan must be imposed on the state.¹³¹ On the other hand, "[o]nce EPA approves a SIP, federal agencies may not take, approve, or fund any activity that does not conform to the SIP."¹³²

A regulatory scheme similarly based on a Cooperative Federalism model could effectively balance the benefits and drawbacks of state versus

¹²⁷ Holly Doremus & W. Michael Hanemann, *Of Babies and Bathwater: Why the Clean Air Act's Cooperative Federalism Framework is Useful for Addressing Global Warming*, 50 ARIZ. L. REV. 799, 817–818 (2008) (citations omitted).

¹²⁸ *Id.* at 818.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.* (citation omitted).

¹³² *Id.*

federal green building regulation. First, the federal government would implement national green building metrics. These metrics should include at least energy efficiency, water conservation, materials and resource usage, site selection and indoor air quality considerations.

Once the national metrics have been established, states and localities should bear the responsibility of developing local codes to meet the national metrics, as well as implementing the system once in place. This structure would allow for the effective utilization of the code administration entities already in place at the state and local level, as well as allowing for variability to meet particular local needs and desires. As many states and localities are starved for funds,¹³³ the federal government must provide resources for development and adoption of the new codes.

As with the Clean Air Act, if a state fails to develop or adopt a satisfactory plan, the federal government would have to provide an alternative code, or punish non-compliance by withholding funding.¹³⁴ Administration for enforcement of the Cooperative Federalism system would be much less difficult and costly than implementing a nationwide code development and enforcement administration, however.

CONCLUSION: THE FUTURE OF GREEN BUILDING REGULATION

After years of quiescence, federal regulation of environmental issues is on the rise, including proposed omnibus climate change legislation.¹³⁵ In the bill passed by the House of Representatives is a provision for the development and implementation of national energy efficiency building codes.¹³⁶ Section 201 provides: for the development of these codes; for adoption or implementation of them by the individual states; and resources for development of compliant codes at the individual state level.¹³⁷ The bill, however, addresses energy issues exclusively. As such, the national energy efficiency building codes that result may create more federalism issues than the bill solves. Provisions regarding how local building codes would interact with the national codes' requirements are ambiguous, at best.

¹³³ See, e.g., Danny Hakim & David M. Herszeshorn, *Paterson Administration Fears Cost of U.S. Health Care Overhaul*, N.Y. TIMES, Oct. 22, 2009, at A27 (indicating that several states are dealing with budget deficits).

¹³⁴ Cf. *supra* notes 128–32 and accompanying text (discussing the Clean Air Act's provisions).

¹³⁵ American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009).

¹³⁶ *Id.* § 201. One code would be created for commercial buildings and one would be created for residential buildings. *Id.*

¹³⁷ *Id.*

For instance, in situations where the national energy efficiency building codes apply in place of state energy codes and the national code conflicts with other code provisions, it is left to the Secretary of Energy to “take appropriate actions to resolve such conflict in a manner that does not compromise the objectives of such codes.”¹³⁸ Overlapping considerations on issues such as insulation are ignored in the bill. A comprehensive green building code addressing the multi-faceted environmental impacts of buildings developed on a Cooperative Federalism model would be a more effective regulatory tool.

¹³⁸ *Id.*

