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COMMENT

Incorporating Third Party Green Building Rating Systems into Municipal Building and Zoning Codes

EDWARD TEYBER*

I. INTRODUCTION

Sustainable building and zoning codes can increase the quality of life, productivity,1 and health of citizens by increasing walkability, density, and interior quality of the built environment, preserving open space for recreational activities and ecological services, and reducing the ecological footprint of individuals through increased efficiencies in heat, water, and electrical systems.2 The local benefits of sustainable buildings include indoor air quality, ecological services, stormwater management,3 walkable communities, reduced construction site waste, perseverance through exacerbated storm conditions brought on by climate change such as "snowmageddons" due to responsible management of surface and run-off water on-site,4

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^{1.} Workers in green buildings are typically happier and healthier. See Charles Lockwood, Building the Green Way, HARV. BUS. REV., June 2006, at 129-30 (citing studies that found up to a fifteen percent increase in employee productivity, less sick time, and increased morale and employee satisfaction in green buildings).

^{2.} *Id*.

^{3.} See Stephen T. Del Percio, Comment, The Skyscraper, Green Design, & the LEED Green Building Rating System: the Creation of Uniform Standards for the 21st Century or the Perpetuation of an Architectural Fiction?, 28 Environs Envil. L. & Pol'y J. 117, 125 (2004).

^{4.} The media's sensationalist coverage of super-storms is evidenced by Canada's January 2009 super-storm and the United Kingdom's unusual

and preserved open space. Considering that buildings in the United States consume 41.1% of the world's energy⁵ – more than transportation or industrial sources, and accordingly are responsible for 38% of the world's CO_2 emissions – the global impact of green buildings' improved efficiencies cannot be overstated.⁶ Worldwide, 30 to 40% of all primary energy is used in buildings.⁷

The built environment, including buildings and other development, plays a substantial role in environmental health, human welfare and economic stability. Building operation accounts for 40% of U.S. energy use; this number increases to an estimated 48% when the energy required to make building materials and construct buildings are included. Building operations alone contribute over 38% of the U.S.'s carbon dioxide emissions and over 12% of its water consumption. Waste from demolition, construction and remodeling makes up over 35% of all non-industrial waste.8

The role of green buildings in mitigating climate change has thus become a hot topic. This literature has begun to elicit change within corporations pursuing third party certification of their corporate buildings and campuses. Perhaps the success of discrete green building projects in mitigating climate change compared to the failure of international regulatory bodies to reach consensus for meaningful change 10 is due to the publicity

snowfall in 2010. See, e.g., David Betty, "Snowmageddon" Brings Washington to a Standstill, The Guardian, Feb. 6, 2010, http://www.guardian.co.uk/world/2010/feb/06/snowmageddon-washington-blizzard-standstill.

^{5.} Buildings Energy Data Book, U.S. DEP'T OF ENERGY, http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3 (last updated Mar. 2012).

^{6.} Green Building Facts, U.S. GREEN BLDG. COUNCIL, https://www.usgbc.org/ShowFile.aspx?DocumentID=18693 (last visited Apr. 12, 2014).

^{7.} UNITED NATIONS ENVT. PROGRAMME, BUILDINGS AND CLIMATE CHANGE: STATUS CHALLENGES AND OPPORTUNITIES 11 (2007), available at http://www.unep.fr/shared/publications/pdf/DTIx0916xPA-BuildingsClimate.pdf.

^{8.} Mara Baum, Green Building Research Funding: An Assessment of Current Activity In the United States 7 (2007) (internal citations omitted), available at http://www.usgbc.org/ShowFile.aspx?DocumentID=2465.

^{9.} See Sarah B. Schindler, Following Industry's LEED: Municipal Adoption of Private Green Building Standards, 62 FLA. L. REV. 285, 288 (2010).

^{10.} See Roger Martella & Kim Smaczniak, Introduction to RIO + 20: A Reflection on Progress Since the First Earth Summit and the Opportunities that

and, in turn, profits associated with certification by a third party green building rating system. In addition to reduced GHG emissions, reduced runoff, reduced maintenance costs, and positive publicity of green buildings for the project developer, green building rating systems also stimulate local commerce and tax revenue streams for municipalities. Additionally, green building rating systems combat greenwashing and ignorance in the marketplace amongst consumers who try to make informed and responsible decisions but do not have the resources to research the validity of claims that a product or building is sustainable. In brief, while municipalities can take actions to realize these benefits, there are right and wrong ways to go about the adoption of third party green building systems, and cities that do not navigate their course wisely will see their legislation stricken down and their intentions frustrated by the courts.

Lie Ahead, 12 Sustainable Dev. L. & Pol'y 4 (2012). But see Kirsten H. Engel & Scott R. Saleska, Subglobal Regulation of the Global Commons: The Case of Climate Change, 32 Ecology L.Q. 183, 187 (2005).

^{11.} But see AIG, AIGRMGREEN REPUTATION COVERAGE § 1(b) (2008), available at http://www.greenbuildinglawupdate.com/uploads/file/AIG%20Insurance.pdf (covering bad press resulting from allegations of greenwashing).

^{12.} Bryan Walsh, *What Is a Green Collar Job, Exactly*?, TIME, May 26, 2008, http://www.time.com/time/health/article/0,8599,1809506,00.html ("President Barack Obama promise[d] to spend \$150 billion in ten years to create five million new 'green—collar jobs,' including jobs in green building, energy efficiency, and sustainable development.").

^{13.} Greenwashing is the marketing of products as sustainable, or green, when the performance of the product is no different than other competing products that are not marketed as green. See Dorit Kerret & Alon Tal, Greenwash or Green Gain? Predicting the Success and Evaluating the Effectiveness of Environmental Voluntary Agreements, 14 PENN ST. ENVTL. L. REV. 31, 35 (2005) (defining greenwash as "merely cosmetic attempts by industry to appear environmentally conscientious-- when industry is in fact resistant to meeting its responsibilities.").

^{14.} See, e.g., Johnathan D. Glater, 'Greenwash': A Way to Say Hogwash, N.Y. TIMES, May 17, 2006, http://www.nytimes.com/2006/05/17/business/businessspecial2/17certify.html?_r=0.

II. A GOVERNMENT ADOPTED STANDARD WOULD HELP CONSUMERS DISCERN THE SUSTAINABLE FROM THE DECEPTIVE TRADE CLAIM

There is controversy as to whether a top down federal building standard would be a good or a bad thing. One camp argues that locally crafted standards specifically tailored to local issues and sensitivities are superior to a federal one-size-fits-all Political beliefs about the proper relationship approach.15 between the federal government and the states aside,16 the benefits of uniformity are seen in the broad adoption of the U.S. Green Building Council (USGBC)'s Leadership in Energy and Environmental Design (LEED) rating systems.17 A federal standard borrowed and adopted by local governments would not face the non-delegation constitutional issue of adopting third party ratings systems. Even if the federal standard did nothing more than set a minimum standard of sustainability in the green building industry, that minimum would help inform some of the ignorance about green buildings - their financial costs and the extent of improved efficiencies – that federal agencies have already begun to address with rating systems for other utilitarian capital such as appliances.18 The Environmental Protection Agency (EPA)'s Energy Star rating system has already been used by third parties to form comprehensive guidance documents for

^{15.} See Jonathan H. Adler, Free & Green: A New Approach to Environmental Protection, 24 HARV. J. L. & Pub. Pol'y 653, 690-91 (2001).

^{16.} Municipalities' authority to regulate land use and zoning is delegated by the State through enabling statutes and the police power.

^{17.} LEED is by far the most widely used green building code in the United States. The LEED rating system offers a hierarchy of four credentials based upon five credit categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, plus an additional 6 points for Innovation in Design and an additional 4 points for Regional Priority. The four levels of certification are Certified (40–49 points), Silver (50–59 points), Gold (60–79 points), and Platinum (80 points), the highest certification. There is variance in this point distribution for some categories of development such as LEED Neighborhood Development and LEED For Homes under LEED v3. See U.S. GREEN BLDG. COUNCIL, GREEN BUILDINGS AND LEED CORE CONCEPTS 19 (2009).

^{18.} See Find ENERGY STAR Products, ENERGY STAR, http://www.energystar.gov/index.cfm?c=products.pr_find_es_products visited Apr. 12, 2014). (last

sustainable construction.¹⁹ This indicates that federal agencies could do the same – presumably better, considering EPA rated the appliances in the first place.

The proliferation of green marketing claims—i.e. recyclable, sustainable, antimicrobial, low volatile organic compounds (VOCs)20 —have left consumers and the general public in the dark about the sustainability and improved efficiencies of these purportedly "green" products.21 The term has become commonplace in the marketing of everyday goods from soap Advertising a product as "green" is detergents to t-shirts. typically used in marketing campaigns to confer the message that the company or product is socially aware of the ecological as well as the social impacts of the product's manufacturing process, and that knowledge and awareness, at minimum, poses a less environmentally damaging alternative to another activity that produces the same desired result.22 However, using the word "green" to describe consumer goods does not necessarily indicate that those goods are consistent with the values of the green movement that was monumentalized at the first Earth Day on April 22, 1970.

The standard for "green" products generally, including buildings, should be higher. Federal agencies such as the Federal Trade Commission (FTC),23 the EPA,24 the Food and Drug

^{19.} Energy Star Program: Take Steps to Reduce Energy Use by 10% Through the Energy Star Program, Am. BAR ASS'N,

http://www.americanbar.org/groups/environment_energy_resources/public_service/aba_epa_law_office_climate_challenge/energy_star.html (last visited Apr. 12, 2014)

^{20.} See An Introduction to Indoor Air Quality (IAQ): Volatile Organic Compounds (VOCs), EPA, http://www.epa.gov/iaq/voc.html (last visited Apr. 12, 2014).

^{21.} Consumer Information: Shopping Green, FED. TRADE COMM'N, http://www.consumer.ftc.gov/articles/0226-shopping-green (last visited Apr. 12, 2014).

^{22.} See, e.g., BP Energy Usage & Carbon Emission Calculator, British Petroleum,

http://www.bp.com/sectionbodycopy.do?categoryId=3321&contentId=7075255&n icam=vanity&redirect=www.bp.com/energycalculator (last visited Mar. 10, 2013).

^{23.} Unfair Methods of Competition Unlawful; Prevention by Commission, 15 U.S.C. § 45(a) (2006).

^{24.} News Releases By Date, Large Fine for Marukai Corporation for Pesticide Violations, EPA (Feb. 14, 2011), http://yosemite.epa.gov/opa/admpress.nsf/

Administration (FDA),25 and the Department of Energy (DOE)26 regulate green claims. In regulating "unfair and deceptive" business conduct, the FTC traditionally brings false advertising claims through 15 U.S.C. §§ 41-58 and the Energy Policy and Conservation Act, 42 U.S.C. §§ 6201-6422, to ensure that advertisements are true and not deceptive to "consumer[s] acting reasonably in the circumstances."27 The FTC issues Green Guides to provide a benchmark in evaluating claims of environmentally friendly products.28 While the Green Guides are not law and are not independently enforceable, advertisements with "allegedly false or unsubstantiated environmental claims" may be prosecuted if their advertised claims are inconsistent with the Green Guidelines under Section 5 of the FTC Act.²⁹ In 2012, the FTC updated the original 1992 Green Guides to address changes in science and the marketplace since the last revision in 1998.30 The updated Green Guides address "green" certifications and seals,31 marketing renewable energy,32 and renewable materials claims.33 Unlike the FTC, whose principal role is to ensure that business claims are true regardless of environmental

d0cf6618525a9efb85257359003fb69d/1a693e4215de143d8525783700647cc8!Ope nDocument (EPA fining Honolulu home care product retailer \$222,030 for selling and distributing unregistered pesticides and improperly labeling pesticide devices).

^{25.} E.g., Andrew Zajac, FDA Warns Green Tea Makers Against Health Claims, LA TIMES (Sept. 8, 2010), available at http://articles.latimes.com/2010/sep/08/nation/la-na-fda-tea-20100908.

^{26.} High Performance Sustainable Building Design RM, U.S. DEP'T OF ENERGY, http://energy.gov/em/downloads/high-performance-sustainable-building-design-rm (last visited Mar. 10, 2013) ("The High Performance Sustainable Building Design (HPSBD) Review Module (RM) is a tool that assists the DOE federal project review teams in evaluating the technical sufficiency for projects that may incorporate HPSBD Guiding Principles at CD-1 through CD-4 for both new construction and existing buildings.").

 $^{27.\ 15}$ U.S.C. §§ 45(a)(3)-4(i) (2006); In re Cliffdale Associates, Inc., 103 F.T.C. 110 app. (1984) (Federal Trade Commission Policy Statement on Deception).

^{28.} Eco in the Market: Green Guides Review, FED. TRADE COMM'N, http://www.ftc.gov/bcp/edu/microsites/energy/about_guides.shtml (last visited Apr. 12, 2014).

^{29. 15} U.S.C. § 45 (2013).

^{30. 16} C.F.R. § 260.2.

^{31. 16} C.F.R. § 260.6.

^{32. 16} C.F.R. § 260.15.

^{33. 16} C.F.R. § 260.16.

impact, the EPA's interest in this matter is tied more to the environmental benefit associated with products and less to the perceived benefit to consumers.³⁴ In that light, EPA can, and has with increasing frequency as of late, bring enforcement actions against businesses fraudulently purporting themselves to be green.³⁵

In addition to federal rating systems, many states have adopted minimum building standards. Minnesota, for example, requires all new state buildings to be built according to the sustainable construction and design policies defined by MINN. STAT. § 16B.325. Many of these state construction requirements have relied upon the adoption of third party standards. Drafted standards have been upheld as an acceptable delegation of powers under Article I, Section I of the U.S. Constitution.³⁶

34. Compare OurWhatMissionand D_0 EPA. http://www.epa.gov/aboutepa/whatwedo.html (last visited Apr. 12, 2014) ("The mission of EPA is to protect human health and the environment."), with About FederalTradeCommission, FED. TRADE COMM'N http://www.ftc.gov/ftc/about.shtm (last visited Apr. 12, 2014) ("Our Mission, [t]o prevent business practices that are anticompetitive or deceptive or unfair to consumers; to enhance informed consumer choice and public understanding of the competitive process; and to accomplish this without unduly burdening legitimate business activity.").

35. News Releases By Date, Large Fine for Marukai Corporation for Pesticide Violations, EPA (Feb. 14, 2011), http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/1 a693e4215de143d8525783700647cc8!OpenDocument (EPA fining Honolulu home care product retailer \$222,030 for selling and distributing unregistered pesticides and improperly labeling pesticide devices).

36. N. Lights Motel, Inc. v. Sweaney, 561 P.2d 1176, 1181 n.3 (Alaska 1977) ("[a]dopting a code written by a private national organization generally does not raise delegation of authority problems as long as the code, organization and edition are clearly specified, and no attempt is made to adopt future amendments."); Electricians & Elec. Contractors' Ass'n v. N.J. Bd. of Exam'rs of Elec. Contractors, 256 A.2d 33, 42 (N.J. 1969) (New Jersey statute requiring electrical construction in accordance with performance standards of the National Electrical Code was constitutional because the National Electrical Code was the "standard accepted safety code in the electrical industry throughout the United States" and where the "procedures of adoption, review and revision reflect a national consensus of manufacturers, consumers, scientific, technical and professional organizations, and governmental agencies."). That LEED has become the national standard for green building rating standards supports the legal argument for municipal adoption of third party green building rating systems into building and zoning codes. Contra, State v. Crawford, 177 P. 360, 361 (Kan. 1919) (finding adoption of future editions of codes an unlawful delegation of legislative authority). While LEED's procedures for revising building certification systems is done through an open

California has also established and revised its building code for sustainable state government buildings.³⁷ The role of states in filling the gap in green building rating systems between private rating systems and a federal fix shows promise, but some municipalities may inevitably wish to go further.

III. MODELS FOR MUNICIPAL ADOPTION OF THIRD PARTY RATING SYSTEMS

Local governments' regulation of land use through zoning, planning, subdivision, and building codes is authorized by the police power and state enabling statutes.³⁸ The police power subrogates individual private property rights in the name of the health, safety, morals, and general welfare of the larger community.³⁹ The purpose of incorporating green building rating systems into building and zoning codes is to protect the public health as well as the health of the environment. American building and zoning codes were invented to address concerns of public health that resulted from urbanization of society at the turn of the 20th century.⁴⁰ Therefore, the police power is

and collaborative process in conformance with USGBC's "Balance and Participation" policy — "striv[ing] to involve different types of members in the discussions and consideration of proposed" new standards — five individuals could comprise an entire committee for revision of one category. U.S. GREEN BLDG. COUNCIL, FOUNDATIONS OF THE LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN ENVIRONMENTAL RATING SYSTEM A TOOL FOR MARKET TRANSFORMATION 8 (2006), available at http://www.usgbc.org/ShowFile.aspx?DocumentID=2041; Schindler, supra note 9 at 305.

37. 2010 CALIFORNIA GREEN BUILDING STANDARDS COD.; 24 CAL. CODE OF REGS. PART 11, CAL. BLDG. STANDARDS COMM'N (2010), available at http://www.documents.dgs.ca.gov/bsc/calgreen/2010_ca_green_bldg.pdf; see also CALGreen, BLDG. STANDARDS COMM'N, http://www.bsc.ca.gov/home/calgreen.aspx (last visited Apr. 12, 2014).

38. Berman v. Parker, 348 U.S. 26, 32-33 (1954); Carl J. Circo, Using Mandates and Incentives to Promote Sustainable Construction and Green Building Projects in the Private Sector: A Call for More State Land Use Policy Initiatives, 112 Penn St. L. Rev. 731 (2008).

39. ROBERT C. ELLICKSON & VICKI L. BEEN, LAND USE CONTROL: CASES AND MATERIALS (2d ed. 2000).

40. See A STANDARD STATE ZONING ENABLING ACT §§ 1, 3 (1924) ("[s]uch regulations [are]... designed to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to

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sufficiently broad for state enabling statutes to authorize local government involvement in green building requirements.⁴¹

The situation that is most obvious and yet presents the greatest legal issues, occurs when a city explicitly adopts a third party green building rating system into its building or zoning code, and then delegates the city's permitting and inspections power to the Green Building Certification Institute ("GBCI")42 or another equivalent private party inspector under another third party rating system. Under this model, a municipality delegates all permitting responsibilities to a third party. Thus, the city has no involvement in the day-to-day permitting required to achieve third party sustainable criteria, and would obtain permits and certificates of occupancy from that third party. This overly broad delegation to a third party is problematic under the non-delegation principle, which is analyzed forthwith.43

A variation of this problematic model occurs when the city makes certification by a selected third party rating system a requirement for issuance of a certificate of occupancy.⁴⁴ This poses fewer legal issues but may be practically infeasible due to the gap between prospective models of performance and actual performance.⁴⁵ Claims for damages for a breach of contract

facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.").

^{41.} Berman, 348 U.S. 26; Circo, supra note 38, at 744-49.

^{42.} GBCI is USGBC's certification and accreditation counterpart. While USGBC is concerned with the policy side of sustainable development, GBCI is concerned with the implementation of that policy through certifying buildings and accrediting LEED Professionals. This separation of powers avoids potential conflicts of interest. *About GBCI*, GREEN BLDG. CERTIFICATION INST., http://www.gbci.org/org-nav/about-gbci/about-gbci.aspx (last visited Apr. 12, 2014).

^{43.} The non-delegation principle prohibits a government from delegating legislative functions to non-legislative branch entities. *See* Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 472 (2001).

^{44.} See, e.g., Marne Sussman & Jason James, Columbia Law School Center for Climate Change, Law Model Municipal Green Building Ordinance 6 (2010), available at http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Resources/Model-Ordinances/Model-Green-

Building/Model%20Municipal%20Green%20Building%20Ordinance.pdf (requiring municipal, commercial buildings, and high-rise multifamily residential buildings larger than 5,000 square feet to be built to LEED-NC Silver).

^{45.} It is impossible to know if a project will meet the Minimum Program Requirements for LEED certification before construction is completed. USGBC

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against the LEED professional, contractor, and building inspectors would likely accompany a building's failure to achieve certification.46 Making certification a requirement for issuance of a certificate of occupancy would ensure that green building projects denied certification would bring suit against LEED Professionals (LEED AP) and contractors to recover for damages and additional costs necessary to achieve compliance. Liabilities for failure to achieve certification can be contractually waived or limited.⁴⁷ Green building practitioners should look elsewhere for advice as to how to protect themselves from liability for projects that fail to meet design phase projections. For the purpose of this Note, it is sufficient to say that the construction of expensive buildings which will not be issued a certificate of occupancy by a third party, and thus would have to be razed or remodeled to achieve certification for a certificate of occupancy, is an impermissible waste of resources.

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Even if a building were to achieve certification, an additional hang-up of municipalities adopting third party green building codes is that the third party green building rating system requires final documents that are not available until construction

mitigates this problem by awarding credits for the design portion of the

46. Hadley v. Baxendale, (1854) 156 Eng. Rep. 145; 9 Exch. 341 (setting forth the basic rule that a party is liable for all losses within reasonable contemplation of the contracting parties at the time of the contract); See generally Carl J. Circo, Will Green Building Contracts Transform Construction and Design Law?, 43 URB. LAW. 483 (2011).

47. See Am. Inst. of Architects, AIA Document A201 -- 2007, General CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, §15.1.6 (2007).

certification application and assessing the likelihood that the project will achieve accreditation if construction activity is consistent with the design-phase plan. See Gifford v. U.S. Green Bldg. Council, No. 10 Civ. 7747, 2011 WL 4343815, at *1 (S.D.N.Y. Aug. 16, 2011) ("In general, the 'LEED certification does not address *actual* building performance," but certifies that they were designed in a way that should result in better performance.") (citing Defendant's Mot. to Dismiss at 5); see also supra Section II. Another approach to certification that avoids the problems of anticipating performance is that taken by The Living Building Challenge, whose requirements are much more rigid than LEED, consisting of a year long vetting process where the project is required to be water and energy self-sufficient, among 20 other requirements. But, the size of the program is indicative of such exacting standards, with only 143 registered projects in 10 countries. See Bryn Nelson, Going Beyond Green: A Seattle Office Building Experiments With Full Sustainability, N.Y. TIMES, Apr.

is substantially complete.⁴⁸ This is problematic where buildings have to issue a certificate of occupancy ("CO") from the local building department or official before they can be operated and occupied. Where green building certification is required for a CO, the delay in occupation would impose a substantial loss of revenue for building owners. A potential remedy for this Catch-22 is the issuance of a temporary CO pending certification.⁴⁹ However, if certification is denied in the interim, the impermissible waste of building space and construction resources discussed above would again rear its head.

An example of a final document required for certification that cannot be obtained prior to completion of construction under LEED v.3.0 is the energy and water-usage reporting requirement; buildings must report energy and water-usage data for five years after a building is issued a certificate of occupancy.⁵⁰ If this reporting requirement is not met, certification can be revoked.⁵¹ Decertification would implicate the same liability for the LEED professional as failure to achieve certification in the first place, but with an extra twist: periods of notice and statutes of limitations would often have expired five years after the building was issued a certificate of occupancy.⁵² Extending the period that LEED professionals are exposed to risk past the statute of limitations leaves owners without a remedy and LEED professionals unable to be confident in their successful certification of a LEED project.

^{48.} JOHN R. NOLON & PATRICIA E. SALKIN, CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT LAW IN A NUTSHELL 252 (2011).

¹⁹ *Id*

^{50.} U.S. Green Bldg. Council, Minimum Program Requirements 5 (2009), available at http://www.usgbc.org/ShowFile.aspx?DocumentID=6715.

^{51.} Id.; Earl K. Cantwell, "LEEDigation" – The Latest on Leed® and Green Building Legal, NYSBA JOURNAL, February 2012 at 49 (certification may be revoked for failure to comply with the energy and water usage reporting requirement).

^{52.} The statutes of limitations for common-law claims are governed by state statute and vary from state to state. *See, e.g.*, N.Y. C.P.L.R. § 214(4) (McKinney 2013) (statute of limitations for recovery of damage to property is three years). *Cf.* Bd. of Educ. of Hudson City Sch. Dist. v. Thompson Constr. Corp., 488 N.Y.S.2d 880, 882 (N.Y. App. Div. 1985) (cause of action against an architect for breach of his contract to design and oversee construction was governed by sixyear statute of limitations); *see* Cantwell, *supra* note 51, at 46, 48.

A third model of green building certification is where a city explicitly adopts a third party green building rating system into its building or zoning code, but retains permitting and inspection authority. This model, with certification issued by city inspectors based upon the criteria of a third party rating system, is the best course of action for a municipality that decides it wants to directly adopt a third party rating system into its code of municipal law.⁵³

An alternative to the adoption of a third party rating system is for a municipality, or group of municipalities, to create their own third party rating system. Columbia's Center for Climate Change Law Model Municipal Green Building Ordinance took the approach of incorporating LEED standards rather than relying on independent experts to develop a model approach or including energy conservation and environmental protection in state building codes.⁵⁴ It is this latter option that is the most viable path to establishing green building codes.⁵⁵

IV. THE NON-DELEGATION PRINCIPLE

Third-party building standards are not developed through a democratic process; the public is not afforded its due process rights to notice and a public hearing.⁵⁶ The non-delegation principle prohibits a government from delegating legislative functions to non-legislative entities.⁵⁷ A municipality's adoption

^{53.} The City of Boston exemplifies this model. Boston was the first city in the country to require private buildings to meet a sustainable building requirement. Boston's approach requires that major building projects (over 50,000 square feet) be LEED certifiable. Certifiable means that while the owner could submit the project to GBCI for certification, it does not need to; all that is needed for receipt of a building permit and certificate of occupancy is for the city of Boston's building inspectors to determine that the building is or will be built to the LEED specifications. See Boston, Mass., Zoning Code art. 37 (2007), available at http://www.cityofboston.gov/Images_Documents/Article%2037%20Green%20Buildings%20LEED_tcm3-2760.pdf.

^{54.} See generally Marne Sussman & Jason James, Columbia Law School Center for Climate Change, Law Model Municipal Green Building Ordinance 6 (2010), available at http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Resources/Model-Ordinances/Model-Green-Building/Model%20Municipal%20Green%20Building%20Ordinance.pdf

^{55.} See, e.g, CalGreen, CAL. CODE REGS. tit. 24, Pt. 11 (2013).

^{56.} Schindler, supra note 9.

^{57.} See generally Whitman, 531 U.S. 457.

of third-party green building rating systems raises constitutional issues because states do not enjoy immunity from federal antitrust laws, and therefore, cities, whose legislative power is an extension of the state's police power, do not either. Delegation of authority to private parties is subject to a heightened standard of review by courts.⁵⁸ "A corollary principle is that the exercise of judgment or discretion of public officials cannot be discharged by delegating that authority to private parties."⁵⁹ Therefore, the question is whether the certification of a building, according to a municipally adopted rating system, involves the third party inspector's discretion significantly enough to violate the non-delegation principle or whether the rating system provides an "intelligible principle" for which the inspector to follow.⁶⁰

The degree of vagueness inherent to green building rating systems – dynamically reacting to new best use practices and feedback from empirical performance metrics – is liable to violate the intelligible principle of the non-delegation doctrine if third party green building rating systems are incorporated into municipal zoning and building documents.⁶¹ If adopted into a municipality's zoning and building codes, those codes could change without legislative approval or oversight.⁶² This non-delegation problem can be avoided by articulating the LEED standards in the building or zoning codes appendices, rather than referring to the LEED standard, which is liable to change at the whim of USGBC.

^{58.} See Texas Boll Weevil Eradication Found., Inc. v. Lewellen, 952 S.W.2d 454, 465 (Tex. 1997) (quoting JOHN LOCKE, SECOND TREATISE OF AMERICAN GOVERNMENT 380-81 (1960)).

^{59.} NOLON ET AL., *supra* note 48, at 254-55.

^{60.} Whitman, 531 U.S. at 472 (quoting J.W. Hampton Jr. & Co. v. United States, 276 U.S. 394, 409 (1928)).

^{61.} See generally Air Conditioning, Heating & Refrigeration Inst. v. City of Albuquerque, 835 F. Supp. 2d 1133 (D.N.M. 2010).

^{62.} State v. Crawford, 177 P. 360, 361 (Kan. 1919) (finding adoption of future editions of codes an unlawful delegation of legislative authority).

V. LEGAL CHALLENGES TO MUNICIPAL CODES COMPRISED OF THIRD PARTY GREEN BUILDING RATING SYSTEMS

A. Anti-trust Claims

A municipality's zoning or building code cannot be challenged under a federal anti-trust suit because the Sherman Anti-Trust Act specifically states that "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with a foreign nation, is declared to be illegal." Municipal zoning ordinances, authorized states' police power, can only control commerce within the state, not between states, in conformance with the dormant commerce clause. However, a municipality's zoning or building code can be challenged under a state anti-trust claim. Such a claim could be brought in federal court if it were joined by an equal protection or dormant commerce clause claim.

The Sustainable Forestry Initiative (SFI) has launched a campaign asserting that LEED's exclusive use of the Forest Stewardship Counsel's (FSC) rating system violates anti-trust laws when adopted by municipal governments, and encourages the outsourcing of lumber industry jobs overseas.67 While this exemplifies the anti-trust issue of a municipality's adoption of third party rating systems, studies of the two rating systems indicate that SFI is inferior in regard to metrics of sustainability

^{63. 15} U.S.C. § 1.

^{64.} U.S. CONST. Art. 1, § 8, cl. 3; see e.g., United Haulers Ass'n, Inc. v. Oneida-Herkimer Solid Waste Mgmt. Auth., 550 U.S. 330, 342 (2007).

^{65.} Colin W. Maguire, The Imposing Specter of Municipal Liability for Exclusive Promotion of Green Building Certification Systems, 1 U. Balt. J. Land & Dev. 157, 160 (2012).

^{66.} *Id.* at 167 (discussing how equal protection and anti-trust federal claims would want to be brought with along with state anti-trust pendent claims to ensure injunctive relief and gain 28 U.S.C. § 1331 federal question jurisdiction).

^{67.} See Demand that USGBC Open the LEED Rating System, SUSTAINABLE FORESTRY INITIATIVE, http://www.sfiprogram.org/markets/green-building/leed-and-sfi/leed-recognized/ (last visited Mar. 18, 2014).

and ethical issues of funding because SFI was established by a conglomeration of lumber companies.68

B. Breach of Contract Claims

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An issue bound to arise in court is a breach of contract or warranty claim that results from the project's failure to meet the desired LEED certification. Typical professional liability insurance does not protect against unrealized warranties or guarantees. 69 Therefore, both design professionals and builders must ensure that their policies cover so called "Green Malpractice".70 To avoid this issue altogether, contract language can be carefully chosen. For instance, one potential solution to the issue of green malpractice liability is to state certification "goals," rather than "specifications," to achieve certification.71 Additionally, to avoid allegations of misrepresentation, builders and developers must be careful about their assurances to investors regarding the certification, energy, and cost savings of a prospective LEED certified building. Phrases such as "built to LEED standards" or "containing LEED elements" should take the place of "will be LEED certified" or even worse, "is LEED certified," before construction is even completed.72 While litigation is likely to occur in an owner's quest to achieve certification by a traditional market based third-party green building rating system, when certificates of occupancy and building permits are contingent upon certification, the marginal cost of litigation becomes surmountable.73 Traditional insurance coverage does not necessarily cover green materials and products, or the extra expense to restore the building to a certifiable state.74 Some insurance companies are starting to cover green-

^{68.} See Lloyd Alter, A Picture is Worth A Thousand Words: FSC v. SFI Forests, TREEHUGGER (Mar. 31, 2009), http://www.treehugger.com/green-architecture/a-picture-is-worth-fsc-vs-sfi-forests.html.

^{69.} PRINCIPLES OF THE LAW OF LIABILITY INSURANCE, APP'X § 8, ALI (2012).

^{70.} For an example of a breach of contract or warranty claim resulting from a project failing to meet the desired LEED certification, see Cantwell, *supra* note 51, at 46.

^{71.} Id. at 47.

^{72.} Id. at 48.

^{73.} Id.

^{74.} Id. at 47.

certified buildings for green re-engineering, re-certification, and re-building.⁷⁵

VI. GREEN BUILDING STANDARDS BEING ADOPTED BY THE FEDERAL GOVERNMENT

Under the Energy Policy Act, states are directed to adopt commercial energy building codes that achieve energy saving equivalent to the ASHRAE76 or IECC77 model codes, however, the Act lacks any provision to impose a penalty upon states that fail to do so.78 IECC79 and ASHRAE80 Standard 90.1 set the bar for energy efficiency in commercial buildings.81 However, the development and distribution of advanced energy design guidance will be a key component of the collaboration.82

Federal Agencies are beginning to establish internal policies requiring LEED Certification for new buildings. The United States Department of Agriculture issued a departmental

^{75.} See AIGRMGreen, supra note 11 (covering bad press resulting from allegations of green washing).

^{76.} Advanced Energy Design Guides Overview/Purpose, ASHRAE, http://www.ashrae.org/standards-research--technology/advanced-energy-design-guides#overview (last visited Apr. 12, 2014) ("The ASHRAE Advanced Energy Design Guides (AEDG) are a series of publications designed to provide recommendations for achieving energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1 which is the first step in the process toward achieving a net zero energy building which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site, renewable energy sources.").

 $^{77.\ \}rm IECC,\ 2012\ INTERNATIONAL\ ENERGY\ CONSERVATION\ CODE,\ available\ at\ http://shop.iccsafe.org/2012-international-energy-conservation-code-soft-cover.html.$

^{78.} See Energy Policy Act of 2005, 42 U.S.C. \S 8259(a).

^{79.} IECC, supra note 77.

^{80.} ASHRAE, supra note 76.

^{81.} Id. ("The ASHRAE Advanced Energy Design Guides (AEDG) are a series of publications designed to provide recommendations for achieving energy savings over the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1 which is the first step in the process toward achieving a net zero energy building which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site, renewable energy sources.").

^{82.} See generally ERIC MAKELA ET AL., PAC. NW. NAT'L LAB., COMPARISON OF STANDARD 90.1-2010 AND THE 2012 IECC WITH RESPECT TO COMMERCIAL BUILDINGS (2011) (report prepared for the U.S. Department of Energy, Energy Efficiency and Renewable Energy, Building Technologies Program).

regulation requiring new construction or major renovation of covered facilities to earn a minimum of LEED Silver certification.83 The U.S. General Services Administration (GSA), which oversees over 361 million square feet of space in 9,600 federally owned or leased facilities,84 required all new federal buildings and major renovations to attain LEED Gold certification in 2010. 85 GSA's leased properties require LEED Silver86 for new construction of 10,000 square feet or more. GSA is required to review rating systems every five years, and is currentlyreviewingLEED 2009, Green Globes, and the Living Building Challenge.87

The American Chemistry Council (ACC)88 challenges GSA's widespreaduse of LEED on anti-trust grounds. 89 ACC has lobbied for the release of LEED v3.0 to be delayed so that these issues can be addressed.90 Legalities aside, ACC is concerned with LEED credits that discourage use of products that contain chemicals and plastics such as foam board or spray foam, floor tiles and roofing membranes, cable jackets and pipes that contain vinyl, adhesives and sealants, and PCB-based LED lighting,

^{83.} UNITED STATES DEP'T OF AGRIC., OFFICE OF PROCUREMENT & PROPERTY MANAGEMENT, DEPARTMENTAL REGULATION No. 5500-001, FACILITIES ENERGY AND WATER CONSERVATION AND UTILITIES MANAGEMENT (June 19, 2006), available at http://www.ocio.usda.gov/directives/doc/DR5500-001.pdf.

^{84.} GSA Moves to LEED Gold for All New Federal Buildings and Major Renovations, U.S. GEN. SERVS. ADMIN., http://www.gsa.gov/portal/content/197325 (last visited Apr. 12, 2014).

^{85.} Id.

^{86.} LEED Silver is a certification of LEED that falls in the continuum between LEED Gold and LEED Certified. *See* U.S. GREEN BLDG. COUNCIL, GREEN BUILDINGS AND LEED CORE CONCEPTS 19 (2009).

^{87.} Id. Green Globes and the Living Challenge are third party green building rating systems that are alternatives to LEED. See The Practical Building Rating System, GREEN GLOBES, http://www.greenglobes.com/home.asp (last visited Mar. 25, 2014); The Standard 2.1, LIVING BUILDING CHALLENGE, http://living-future.org/lbc (last visited Mar. 25, 2014).

 $^{88.\} Am.\ Chem.\ Council,\ http://www.americanchemistry.com/default.aspx (last visited Mar. <math display="inline">18,\,2014).$

^{89.} Nadine M. Post, *Tumult Hits Popular LEED Rating System*, ARCHITECTURAL RECORD (July 20, 2012) http://archrecord.construction.com/news/2012/07/120720-Tumult-Grows-Over-LEED-Rating-System-Update.asp.

^{90.} See Congressional Concerns Mounting About USGBC's Flawed LEED Program, Despite Delayed Balloting, Am. CHEM. COUNCIL, http://www.americanchemistry.com/Media/PressReleasesTranscripts/ACC-news-releases/Congressional-Concerns-Mounting-About-USGBCs-Flawed-LEED-Program-Despite-Delayed-Balloting.html (last visited Apr. 12, 2014).

skylights, and canopies.⁹¹ As discussed above in connection with anti-trust issues that arise when municipalities adopt third party green building rating systems, the SFI has launched a similar campaign to ACC's, asserting that LEED's exclusive use of the Forest Stewardship Counsel's (FSC) rating system violates anti-trust laws when adopted by municipal governments and encourages the outsourcing of lumber industry jobs overseas.⁹² The issue of renewable building materials in third party rating systems is significant because buildings and infrastructure contain 90% of all materials ever extracted from the earth.⁹³ On this scale, slight variations in standards extrapolate to result in significant degrees of sustainability.

Trade associations' objections aside, EPA and DOE have developed green certifications that are comparable to third party rating systems. 94 These certifications assist consumers in determining whether a product is "green," and hence reduce the effect of greenwashing upon the marketplace. While DOE's energy-efficiency standards are mandatory; 95 EPA has three voluntary standards: Energy Star, Water Sense, and the Design for Living's Environmentally Preferred Purchasing Program. 96

^{91.} Nadine M. Post, *Tumult Hits Popular LEED Rating System*, ARCHITECTURAL RECORD (July 20, 2012) http://archrecord.construction.com/news/2012/07/120720-Tumult-Grows-Over-LEED-Rating-System-Update.asp.

^{92.} See Lloyd Alter, A Picture is Worth A Thousand Words: FSC v. SFI Forests, TREEHUGGER (Mar. 31, 2009), http://www.treehugger.com/green-architecture/a-picture-is-worth-fsc-vs-sfi-forests.html.

^{93.} Charles J. Kibert, Green Buildings: An Overview of Progress, 19 J. LAND USE & ENVTL. L. 491, 493 (2004).

^{94.} The FTC through the Green Guides documents EPA through Energy Star, Water Sense, and the Design for Living's Environmentally Preferred Purchasing Program. *See supra* Section II.

^{95. 10} C.F.R. § 430.32(a) (2012).

Environmentally 96. See Preferred Purchasing (EPP),http://www.epa.gov/epp/pubs/federalefforts.htm (last visited Jan. 27, 2012); WaterSense: AnEPA Partnership Program, EPA, http://epa.gov/ watersense/general.html#energystar (last updated Mar. 13, 2014) ("WaterSense is similar to ENERGY STAR in that both programs work toward market enhancement and public recognition through the labeling of products and programs. One of the main differences between these two programs is that WaterSense requires third-party certification of its products and services, ensuring that they comply with WaterSense's specifications. Another major difference is that WaterSense focuses on water-using products and services that don't require energy to run, solely focusing on their water-efficient properties. ENERGY STAR includes water-using products that conserve energy.").

EPA's Energy Star standard has become an industry standard and is adopted into LEED's rating system as a baseline for energy efficient appliances.97 Energy star is a voluntary certification; manufacturers choose to obtain an Energy Star label for appliances if they meet EPA's higher energy efficiency standard.98 "If all U.S. households followed the ENERGY STAR Pledge, 99 we would prevent greenhouse gases equivalent to the emissions of 20 million cars."100 Although Energy Star is voluntary, manufacturers are beginning to find that having such a label on their products is required to enter the marketplace.101 In addition to its voluntary rating systems, EPA has encouraged Environmentally Preferred Purchasing by identifying "greener" products that are "less damaging to human health and the environment when compared with competing products or services that serve the same purpose" throughout the lifecycle of a product.102 EPA's initiatives exemplify how well established standards for which to evaluate the environmentally friendly

^{97.} See, e.g., Find ENERGY STAR Products, ENERGY STAR, http://www.energystar.gov/index.cfm?c=products.pr_find_es_products visited Apr. 12, 2014) (showing a listing of products certified under the Energy Star standard).

^{98.} About Energy Star, ENERGY STAR http://www.energystar.gov/about/(last visited Apr. 12, 2014).

^{99.} EPA, ENERGY STAR PLEDGE DRIVER NEWSLETTER ARTICLES (2011), available at

 $http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web\&cd=5\&ved=0C\\ FcQFjAE\&url=http%3A%2F%2Fwww.energystar.gov%2Fia%2Fproducts%2Fglobalwarming%2FCTW_Sample_Newsletter_Articles.doc&ei=lRc9UYWXI83y0wHil4CYDw&usg=AFQjCNHtd-iy0jOJgUTWbVWWvdYbni8btQ&sig2$

⁼wB_12s6Z4M_0sVO6AS0wxQ&bvm=bv.43287494,d.dmQ (taking the energy star pledge involves pledging to make small, energy-saving changes that collectively make a big difference: changing light bulbs to those that have earned the ENERGY STAR Use, a programmable thermostat to save energy while asleep or away from home, enabling power management settings on computers and monitors so they go into "sleep mode" when away or not in use, buying ENERGY STAR qualified products, and making sure your home is well sealed and insulated).

^{100. @}EPARegion2, TWITTER (Oct. 10, 2012, 5:50 PM EST), https://twitter.com/EPAregion2/status/256194984364081152.

^{101.} See Preface to U.S. Gov't Accountability Office, GAO-11-888, Providing Opportunities for Additional Review of EPA's Decisions Could Strengthen the Program (Sept. 29, 2011), available at http://www.gao.gov/assets/590/585547.pdf.

^{102.} See Greener Products: Retail Industry, EPA, http://www.epa.gov/greenerproducts/pubs/retailer.html#one (last updated Nov. 21, 2013).

nature of a product can avoid undercut greenwashing of the market. Taking this message, municipalities can take or establish environmentally friendly standards for construction products to be used as a benchmark or minimum criteria for evaluating claims.

The DOE Office of Energy Efficiency and Renewable Energy (EERE) and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) are to work together to develop energy efficiency standards and cooperate on energy programs.¹⁰³ On July 19, 2012, the DOE published a final determination requiring states to review and possibly update their low-rise residential building¹⁰⁴ energy efficiency codes if they were not equivalent to the 2009 International Energy Conservation Code (IECC).105 On July 20, 2012, the DOE required that by July 20, 2013, states provide certification to DOE that they have reviewed energy efficiency provisions in their commercial building codes, 106 and updated their codes to comply with or exceed standards published in 2007 by the ASHRAE Standard 90.1-2007.107 The standard covers building lighting and power requirements and building mechanical requirements. amongst other areas.108

^{103.} EERE News: DOE and ASHRAE Sign Agreement to Improve Building Energy Standards, U.S. DEP'T OF ENERGY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY (July 25, 2011), http://apps1.eere.energy.gov/news/progress alerts.cfm/news id=20221?print.

^{104.} Low-rise residential building means any building three stories or less in height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more). 10 C.F.R. § 435.2 (2013).

^{105.} Building Energy Standards Program: Determination Regarding Energy Efficiency Improvements in the Energy Standard for Buildings, Except Low-Rise Residential Buildings, ANSI/ASHRAE/IESNA Standard, 76 Fed. Reg. 43,287-01, 43,287 (July 20, 2011).

^{106.} Commercial and multi-family high-rise residential building means all buildings other than low-rise residential buildings, including high-rises greater than three stories, multifamily residential buildings, and other similar buildings. 10 C.F.R. § 433.2 (2013).

^{107.} Building Energy Standards Program: Determination Regarding Energy Efficiency Improvements in the Energy Standard for Buildings, Except Low-Rise Residential Buildings, ANSI/ASHRAE/IESNA Standard, 76 Fed. Reg. at 43,287; ASHRAE means the American Society of Heating, Refrigerating and Air—Conditioning Engineers. 10 C.F.R. § 433.2.

^{108. 10} C.F.R. § 433.2.

VII. COMPATIBILITY OF GREEN BUILDING STANDARDS WITH GOOD PLANNING PRACTICES

Rather than adopting mandatory green building and design standards, many cities offer tax incentives, 109 expedited permitting processes, or height and density bonuses to developers who agree to build in compliance with green building design principles.110 Project managers should also be aware of federal tax incentives for tax payers who generate electricity and sell it back to the grid through wind, closed-loop biomass, open-loop solar energy, biomass, geothermal energy, marine hydrokinetic renewables,111 hydropower,112 and municipal solid waste. 113 Businesses that invest in statutory renewable energy sources on site are eligible for additional tax credits of 30% the initial investment.114 In the current saturated real estate market, following mass foreclosures in 2007 and 2008, awarding

^{109.} See S. Builders, Inc. v. Shaw Dev., LLC, No. 19-C-07-011405 (Somerset County Cir. Ct. Md. 2007).

^{110.} See Green Building Incentives, The CITY OF SANTA MONICA, http://www.smgov.net/Departments/OSE/Categories/Green_Building/Incentives. aspx (last visited Apr. 12, 2014) (The City of Santa Monica offers expedited plan review for projects pursuing LEED certification. This expediting process reduces initial plan check turn around time by one week).

^{111.} Marine and hydrokinetic energy is energy derived from waves, tides, and currents in oceans, estuaries and tidal areas; free flowing water in rivers, lakes and streams; free flowing water in an irrigation system, canal or other manmade channels, or differentials in ocean temperature (ocean thermal energy conversion). Marine and hydrokinetic energy does not include any energy that is derived from any source that uses a dam, diversionary structure or impoundment for electric power production purposes. H.R. REP. No. 110-658, at 48 (2008)

^{112.} Taxpayers seeking to obtain tax credits through selling hydroelectric generation need be certified by the Federal Energy Regulatory Commission in addition to state certification pursuant to 33 U.S.C. § 1341 (Clean Water Act § 401).

^{113.} Rates range from \$.011 to \$ 0.023 per kilowatt hour of electricity produced from qualifying renewable resources. Jerome L. Garciano, Energy Efficiency and Renewable Energy Tax Incentives Federal and State Energy Tax Programs 13-14 (2013), available at http://www.wbdg.org/pdfs/tax_incentive_outline.pdf (citing I.R.C. § 45 (2012); Rev. Rul. 98-27, 1998-18 I.R.B. 14; Notice 97-30, 1997-1 CB 416; Notice 96-25, 1996-1 CB 375; Rev. Proc. 2007-65; Announcement 2009-69; INFO 2010-0025; INFO 2010-0037; Notice 2010-37; Notice 2011-40; Notice 2012-35).

^{114. 26} USC § 48.

density bonuses to builders for subscribing to green building principles does not make much sense.115

Municipal visionary documents, zoning codes, and building codes ought to reflect smart growth, 116 new urbanism, 117 and sustainable design principles when identified as important by the community. 118 However, the ability of a boilerplate third party zoning document to deal with a wide spectrum of priorities from locality to locality is dubious. 119 Communities that have identified historical preservation as a priority in their comprehensive plan may be conflicted in balancing historical preservation with renewable energy strategies that include technologies such as solar panels, wind turbines, and window

^{115.} See Julie Creswell & Vikas Bajaj, Mortgage Crisis Spirals, and Casualties Mount, N.Y. TIMES (Mar. 5, 2007), http://www.nytimes.com/2007/03/05/business/05lender.html?pagewanted=all&_r=0.

^{116. &}quot;Smart growth is a principle of land development that emphasizes mixing land uses, increases the availability of affordable housing by creating a range of housing opportunities in neighborhoods, takes advantage of compact design, fosters distinctive and attractive communities, preserves open space, farmland, natural beauty and critical environmental areas, strengthens existing communities, provides a variety of transportation choices, makes development decisions predictable, fair and cost effective and encourages community and stakeholder collaboration in development decisions." MASS. GEN. LAWS ANN. ch. 40R, § 1 (2004).

^{117.} New Urbanism, advocating for compact development, is more focused on architecture and community design than the Smart Growth. "New Urbanism calls for more human scale, walkable streets, the mixing of shops and residence in the urban center designed to generate city life, and a higher density, less automobile-dominated community." James A. Kushner, Smart Growth, New Urbanism and Diversity: Progressive Planning Movements in America and Their Impact on Poor and Minority Ethnic Populations, 21 UCLA J. ENVIL. L. & POL'Y 45, 48 (2003).

^{118.} Cf. JOHN LOCKE, TWO TREATISES OF GOVERNMENT 132 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690).

^{119.} Locally drafted building certification systems provide opportunities for notice and comment by affected parties. Schindler, *supra* note 9. National mandates rarely take into consideration the unique requirements of differing regions around the country; variations in climate - hot, humid, very cold, or very rainy - will quickly identify deficiencies through building failures that codification simply cannot predict. As construction firms and contractors quickly morph into green practitioners, lack of expertise will result in design and construction deficiencies and an increase in lawsuits. George H. DuBose & Chuck Allen, *What Happens When Green Becomes Code: Increased Standard of Care, Risk, and Change in Building Practices – Are You Prepared?* (Feb. 12, 2013),

 $https://www.registrationheadquarters.com/events/?uid=WPL_\&eid=8904\&mid=2465700\&rid=982395801\&rtype=mm\&murlid=22413558.$

replacement, and even passive light and heat designs, which are components of many third-party green building standards. 120 One solution to this problem is to allow for the purchase of off-site renewable energy credits to supplement the lack of on-site renewable energy in historically preserved neighborhoods. 121

If new buildings are required to meet sustainability metrics that emphasize local sourcing, the impacts on local ecosystems and open space could be adverse. Under a traditional building code, there are not enough voluntary green building projects to affect change in production and distribution systems that facilitate local sourcing; only building projects that are leaders in energy and environmental design will obtain credits for local sourcing. Everyone cannot be a leader. However, mandatory rating system certification would create a situation where everyone is trying to be a leader. One of the drawbacks of this among many more benefits—is that if local sourcing was encouraged for certification, the critical mass of builders required to conform to the standards could catalyze changes in systems and infrastructure so as to easily obtain points without any corresponding environmental or land use benefit. This problem is best exemplified by LEED's local materials points, where builders get two points for using "building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles . . . of the project site."122 Having these points available in an optional certification system would not incentivize new quarries, mines, and timber operations within 500 miles of new development projects. However, having these points available in the context of a mandatory green building code would increase the likelihood of new quarries, mines, and timber operations opening within 500 miles of new development projects, as there would be a significantly higher number of builders seeking credits to meet those heightened green building requirements.

 $^{120.\} U.S.$ Green Bldg. Council, LEED Green Associate Study Guide 84-86 (2009).

^{121.} Id. at 87.

^{122.} U.S. GREEN BLDG. COUNCIL, MATERIALS AND RESOURCES CREDIT 5: REGIONAL MATERIALS (2012), available at http://www.usgbc.org/ShowFile.aspx?DocumentID=9250.

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VIII. CONCLUSION

The initial investment in green buildings can improve performance, which 1) pays off the initial investment in maintenance and utility costs in the long-term, 2) can lead to expedited regulatory permitting review and approval processes, and 3) results in increased community and political project support. Municipalities that mandate buildings meet an established green building standard make it easier for project managers to partake in these associated benefits of green buildings. Additionally, municipalities can function more efficiently as a result of the extensive predesign phases and streamlined permitting that is associated with green buildings. However, when a municipality relies extensively upon third party building standards, such as LEED, the legal as well as practical implications are substantial enough that municipalities should look to alternative methods to achieve these benefits. current trend of green codification by municipalities has consequences that should be acknowledged as these standards become the law of the land. It is important to keep in mind that this is a dynamic process. LEED professionals, builders, and property owners should be aware of the stages involved in this process, and, when contracting, must be careful not to overstate the certainty of LEED accreditation or the benefits thereof. These legal, land use, and smart growth planning issues are magnified when municipalities adopt third party green rating systems into their zoning and building codes as constitutional, anti-trust, and preemption issues are thrown into the melee. Municipalities wishing to enjoy the benefits of a standardized green building requirement have several options, but should be careful not to risk invalidation of their ordinance by taking shortcuts and overly borrowing from third party rating systems.