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FOLLOWING INDUSTRY'S LEED®: MUNICIPAL ADOPTION OF PRIVATE GREEN BUILDING STANDARDS

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Abstract

Local governments are beginning to require new, privately constructed and funded buildings to be "green" buildings. Instead of creating their own, locally-derived definitions of green buildings, many municipalities are adopting an existing private standard created by members of the building industry: LEED (Leadership in Energy and Environmental Design). This Article explains and assesses the privately promulgated LEED standards. It argues that the translation of LEED standards, which were intended to be voluntary, into law raises several theoretical and practical problems. Specifically, private green building ordinances that rely on LEED do not ensure a reduction in the negative local environmental impacts of buildings, nor do they provide any assurance that those standards were created through a legitimate process. The Article concludes by offering an alternative approach, suggesting that municipalities should instead enact green building ordinances that have been promulgated by public governmental bodies, rather than private, industry-based organizations, and done so locally, taking into account specific local building-related and environmental concerns.

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I. INTRODUCTION: AN EMERGING TREND IN MUNICIPAL LAW

An old building with poor insulation and dripping faucets sits in the middle of a busy, traditional downtown. It is close to a number of city bus routes and an underground subway stop. It has no parking lot or structure associated with it, and it is a short walk from a large city park. Across the county, a brand-new energy-efficient commercial building has just been constructed in the middle of a recently rezoned former plot of farmland. It has a green roof[1] and its large covered parking lot boasts a number of solar panels. The nearest homes and stores are ten miles away, connected to this new building by recently constructed roads and other infrastructure. Which is the "greener" building?[2] And more importantly, who should make that decision?

Despite the impacts that buildings have on local, regional, and even global ecosystems, governments have traditionally given surprisingly little consideration to the way that buildings and building practices affect the

1. A green roof (also called a vegetated or living roof) is a roof covered with soil, vegetation, and drainage mechanisms.

2. Green building has been defined as that which "relates to a facility's design, construction, operation, or renovation, in which the waste generated is disposed of in an ecologically sound manner." Nancy J. King & Brian J. King, *Creating Incentives for Sustainable Buildings: A Comparative Law Approach Featuring the United States and the European Union*, 23 VA. ENVTL. L.J. 397, 404 (2005); *see also* Charles J. Kibert, *Green Buildings: An Overview of Progress*, 19 J. LAND USE & ENVTL. L. 491, 491–92 (2004) ("[F]acilities designed, built, operated, renovated, and disposed of using ecological principles for the purpose of promoting occupant health and resource efficiency plus minimizing the impacts of the built environment on the natural environment.").

environment. That oversight is unfortunate because their environmental effects are dramatic. Construction and demolition waste make up approximately one-third of all landfilled materials.[3] Stormwater runoff from roofs containing asbestos degrades local stream and river quality, as does erosion and sediment from building construction practices. Buildings and infrastructure contain up to 90% of all materials that have ever been extracted from the environment,[4] and in the United States, buildings consume nearly 40% of all primary energy.[5] On an even broader scale, building construction activities and the energy used to operate those buildings contribute more than any other source to man-made carbon dioxide production, and thus to climate change.[6]

Designing regulations to address sweeping environmental problems such as climate change has not been easy nor, thus far, very successful. Conventional wisdom suggests that a global regulatory solution is needed to successfully address a global environmental problem such as climate change.[7] However, a true global solution has yet to emerge. Governments at the state and federal levels have attempted to reach consensus around ideas for broad climate change legislation, with little success. [8] The focus

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3. U.S. ENVTL. PROT. AGENCY, CHARACTERIZATION OF BUILDING-RELATED CONSTRUCTION AND DEMOLITION DEBRIS IN THE UNITED STATES 3-1 (1998), *available at* http://p2pays.org/ref/02/01095.pdf.

4. Kibert, *supra* note 2, at 493.

5. U.S. DEP'T OF ENERGY, ENERGY EFFICIENCY AND RENEWABLE ENERGY, 2008 BUILDINGS ENERGY DATA BOOK 1–3 (2008), *available at* http://buildingsdatabook.eren.doe.gov/docs/DataBooks/2008_BEDB.pdf [hereinafter 2008 BUILDINGS ENERGY DATA BOOK]; U.S. DEP'T OF ENERGY, ENERGY INFO. ADMIN., ANNUAL ENERGY REVIEW 2003, DOE/EIA-0384 36 (2003), *available at* http://tonto.eia.doe.gov/FTPROOT/multifuel/038403.pdf; Charles J. Kibert, *Policy Instruments for a Sustainable Built Environment*, 17 J. LAND USE & ENVTL L. 379, 379, 381 (2002).

6. 2008 BUILDINGS ENERGY DATA BOOK, *supra* note 5, at 1–30; *see also* THE MAYOR'S TASK FORCE ON GREEN BUILDING FOR THE CITY AND COUNTY OF SAN FRANCISCO, REPORT AND RECOMMENDATIONS 4 (2007), *available at* http://www.sfenvironment.org/downloads/library/gbtfrreleasev1.3.pdf [hereinafter MAYOR'S TASK FORCE REPORT, SAN FRANCISCO] ("As the City looks at a broad range of policies and programs to improve sustainability, it recognizes that buildings are the number one contributor to man-made CO_2 production (greater than transportation and industrial sources), and have significant impacts on air quality, landfill, transportation, energy consumption, resource use, and occupant health and productivity.").

7. Kirsten H. Engel & Scott R. Saleska, *Subglobal Regulation of the Global Commons: The Case of Climate Change*, 32 ECOLOGY L.Q. 183, 187 (2005).

8. Although the landscape in this area is rapidly changing, a number of federal climate change bills have been proposed but failed to pass. For example, the Lieberman-McCain Climate Stewardship Act was brought before the Senate in 2003 as a bipartisan effort toward a nationwide climate change policy. Lieberman-McCain Climate Stewardship Act, S. 139, 108th Cong. (2003). Among other things, the Act would have required the Administrator of the Environmental Protection Agency to implement regulations that would limit the amount of greenhouse gas emissions from various sectors of the economy (accountable for approximately 85% of U.S. emissions in the year 2000), with the goal of capping the 2010 aggregate emissions level at the 2000 level. *Id.* § 316; *see* Pew Center on Global Climate Change, Summary of the Lieberman-McCain Climate Stewardship Act, http://www.pewclimate.org/policy_center/analyses/s_139_summary.cfm

has thus shifted to how environmental impacts can be addressed at more discrete levels, such as by regulating buildings.

In recent years, a uniform, nationally promulgated *private* regulatory scheme has begun taking hold: Leadership in Energy and Environmental Design (LEED®) green building standards, developed by the United States Green Building Council (USGBC). Many of the early adopters of this privately created regulatory scheme have been municipalities.[9] Because local governments are typically responsible for issuing discretionary permits for the construction of new buildings, they are easily able to require additional regulation of private development projects.[10] By imposing green building requirements on private developers, local

(last visited Nov. 15, 2009) (summarizing bill). Even after a revised version was proposed to amend the original bill, it still failed by a vote of 43 to 55. Pew Center on Global Climate Change, 108th Proposals in Detail (1), http://www.pewclimate.org/what_s_being_done/in_the_congress/108th v2.cfm#emissionlimits (last visited Jan. 24, 2010). Similarly, a 2008 attempt at federal climate change policy, the Lieberman-Warner Climate Security Act, also failed after being debated. Lieberman-Warner Climate Security Act of 2008, S. 3036, 110th Cong. (2008); *see also* Eric Pooley, *Why the Climate Bill Failed*, TIME, June 9, 2008, *available at* http://www.time.com/time/nation/article/0,8599,1812836,00.html (discussing the Lieberman–Warner Climate Security Act's failure to pass). States are not immune to the problems in passing climate change legislation. Indeed, California, often thought to be on the more liberal and progressive end of environmental issues, has recently seen several bills aimed at environmental protection fail as a result of Governor Schwarzenegger's veto power. *See* Press Release, Natural Res. Def. Council, A Mixed Finish for 2008 Environmental Bills in California, Says NRDC (Oct. 10, 2008), *available at* http://www.nrdc.org/media/2008/081010.asp (listing signed and vetoed environmental bills in California in 2008 and highlighting Governor Schwarzenegger's veto of SB 974, which would have substantially helped reduce air pollution produced by California's ports).

9. *See, e.g.*, Database of State Incentives for Renewables & Efficiency (DSIRE), Texas Incentives/Policies for Renewables and Efficiency, Austin-Green Building Requirement for City Projects, http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=TX14R&CurrentPageID=1&RE=1&EE=1 (last visited Jan. 24, 2010) (providing information on June 2000 adoption of LEED standards in Austin, Texas); SANTA MONICA CITY STAFF, REPORT TO MAYOR AND CITY COUNCIL RECOMMENDING APPROVAL OF GREEN BUILDING GRANT PROGRAM AND INNOVATIVE TECHNOLOGY GRANT PROGRAM (2004), *available at* http://www01.smgov.net/cityclerk/council/agendas/2004/20040113/s2004011308-B.htm (providing history of Santa Monica Green Building incentives and noting that "the City Council adopted a policy effective July 1, 2001, that requires all new construction and major renovations of City facilities to meet the Silver level of LEED wherever feasible"); City of Seattle Dep't of Planning & Dev., City Green Building: Seattle's Policy & Progress, http://www.cityofseattle.net/dpd/GreenBuilding/CapitalProjects/SeattlesPolicy/default.asp (last visited Jan. 24, 2010) (noting Seattle's 2000 adoption of a Sustainable Building Policy, which requires LEED silver certification for all new city-funded projects and certain renovations; providing link to text of policy). In the United States, local governments have typically regulated public land use. ROBERT C. ELLICKSON & VICKI L. BEEN, LAND USE CONTROL: CASES AND MATERIALS 34 (2d ed. 2000). There are multiple forms of local governments that engage in land use regulations, including counties, municipalities, towns, townships, and special districts. *Id.* Although each form is distinct, throughout this Article for ease of readability, the terms for the different local governmental units will be used interchangeably.

10. This is still a nascent trend, though one that is growing. Many of the ordinances that have been adopted have not yet gone into effect.

governments are attempting to limit local environmental externalities created by building construction and operation. The climate change benefits of those buildings are a bonus that piggybacks onto local benefits.

While the encouragement of green buildings at the local level is certainly a step in the right direction toward lessening the negative environmental impacts of buildings, ordinances that force private developers to comply with uniform standards developed by a private building-industry organization are fraught with practical and legal problems that have not been fully explored in scholarly literature.[11] This Article analyzes from a normative and legal perspective this emerging green building regulatory regime. It cautions against local requirements that force private developers to comply with nationally promulgated, private, voluntary LEED standards as opposed to publicly created local ones.

At the most general level, this Article is concerned with the fact that municipalities are allowing unelected members of a private, industry-centered organization to promulgate—and in some cases enforce—standards that restrict what a property owner may do with her property and hinder the community's ability to ensure the healthiest possible environment. Incorporating such private regulations into the law fails to achieve what should be the two fundamental goals of a new green building regime: (1) efficacy and (2) legitimate process. This Article uses "efficacy" to mean that a green building regime should cost-effectively ensure that green building measures are strong enough to reduce key local

11. At this point, most legal commentators have simply stated that incorporating standards, such as the LEED standards, into building and planning codes is not a good idea, without offering detailed discussions as to why. *See* 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, 747 (2008) ("Standards of this nature [such as LEED] are not good candidates to incorporate into building codes or other mandatory regulations and are best left to voluntary industry initiatives."); Benjamin S. Kingsley, Note, *Making it Easy to Be Green: Using Impact Fees to Encourage Green Building*, 83 N.Y.U. L. REV. 532, 548 (2008) ("Despite the clear effectiveness of building requirements, however, an abundance of literature suggests that such requirements have negative effects on development."). While these concerns have by and large been ignored by academic and legal commentators, some state and local government players have noted their concerns. *See, e.g.*, Dan Walters, *Private Law Undercuts Democracy*, SACRAMENTO BEE, Aug. 6, 2007, at A3, *available at* 2007 WLNR 15102662 ("By all accounts, USGBC [(the entity that promulgates the LEED standards)] is a legitimate organization that acts as a forum for agreements on environmentally friendly building standards. But it's not the only organization doing that work. At any rate, the standards it decrees and the methods it uses to draft those decrees are matters of its internal politics—including influence from those who support it financially—and are shielded from input by the outside world. Under [a proposed state Green Building bill], California taxpayers would be on the hook for whatever standards USGBC developed by whatever process it uses. Were this an isolated case, it might merit a pass, but it's part of a broader legislative tendency to avoid tough policy decisions by shifting them to unaccountable outside organizations.").

environmental externalities caused by buildings.[12] This Article uses "legitimate process" to mean the regime should ensure that the regulations implemented by local governments are subject to a promulgation and enforcement process that contains elements of transparency, democracy, and openness to public participation or that provides notice and an opportunity for voice and exit.[13] Although any action that in fact lessens the environmental harm caused by building practices and operation represents a good first step, the goals of efficacy and legitimate process will not be met if cities continue to rely on privately developed LEED standards as the centerpiece of their green building regulations.

Part II of this Article analyzes issues of scale and considers whether green building requirements should be imposed at a local, national, or international level. One purpose of green building ordinances is to reduce the harmful effects of global warming.[14]

Because climate change is a global problem, many commentators contend that it must be addressed at an international or transnational level. While there is some merit to this claim from a policy perspective, buildings do not only contribute to the global climate change problem, but also result in numerous local externalities and environmental harms, such as water and energy over-consumption, poor river quality due to erosion and sedimentation, and degraded indoor and outdoor air quality. These local problems, which vary from region to region, are best addressed at a local level, from both an efficacy and legitimate process standpoint. Moreover, local governments have already begun to take action by enacting private green building mandates in the face of inaction at the national and international level.

Part III presents a descriptive analysis of LEED's role in furthering green building practices and its recent co-option by municipalities. This Part begins by providing background on LEED green building standards. Among the municipalities that have decided to require private development projects to be "green buildings" or include green design elements, the most common method of regulation is to require the developer to demonstrate that its building could achieve LEED certification.[15] Part III also provides

12. Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority*, 14 YALE L. & POL'Y REV. 23, 25 (1996) ("A fundamental issue is how to allocate regulatory authority so that political institutions and processes will yield policies that achieve the optimal or efficient level of pollution without imposing unnecessary costs on productive economic activity.").

13. Voice is the ability to influence a political process through active participation, while exit is aggressive nonparticipation in the process, such as the ability not to comply with a regulation. JESSE DUKEMINIER ET AL., PROPERTY 1064 (6th ed. 2006). *See also* WILLIAM A. FISCHEL, REGULATORY TAKINGS: LAW, ECONOMICS, AND POLITICS (1995).

14. *See infra* note 22 and accompanying text.

15. These ordinances come in the form of new chapters or sections in zoning or planning codes, as well as in building codes.

background on the emergence, composition, and practices of the entity that created the LEED green building standards, the USGBC: a national, non-profit organization comprising members of the building industry and others interested in green building.[16] Finally, this Part explains LEED as it was meant to operate—as a private, voluntary market mechanism—and analyze why municipalities have decided to adopt it into their codes.

Part IV begins an analysis of the form and content of private municipal green building mandates by first laying out the twin goals of a green building regime: efficacy and legitimate process. Next, this Part describes a spectrum of possible approaches to development and enforcement of green building standards, ranging from purely public to purely private. Using this framework, Part IV analyzes the type of green building regime that would best achieve the goals of efficacy and legitimate process.

Part V focuses on the content of LEED-based green building ordinances with respect to the first regime goal: efficacy. This Part first argues that cities should promulgate green building requirements locally, taking into account specific local building-related and environmental concerns. Part V then addresses the need for public bodies to be more cognizant of translation problems that are involved in borrowing private rules. Finally, this Part argues that allowing private, industry-based organizations to promulgate standards that bind their own industries is not the most efficacious manner in which to ensure the strongest cost-effective environmental protection measures. Specifically, industry-derived uniform regulations tend to be inflexible and are often set too low to achieve real benefits.

Part VI turns to the means by which LEED-based green building ordinances are promulgated and the second regime goal: legitimate process. This Part raises concerns that the LEED promulgation process is not legitimate when translated from a voluntary standard to a mandate. A public process for developing standards would better address process concerns, including democracy, transparency, notice, voice, and exit. Finally, Part VI addresses the fact that private entities are not subject to the same open government requirements as are public agencies, and thus a public standards-development process would foster a more legitimate regulatory process.

16. U.S. Green Building Council, About USGBC, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124 (last visited Jan. 24, 2010). The USGBC is a fine example of what some refer to as "quangos"—quasi-autonomous nongovernmental organizations. *See* Clark Havighurst, *Foreword: the Place of Private Accrediting Among the Instruments of Government*, 57 LAW & CONTEMP. PROBS. 1, 1 (1994); *see also* King & King, *supra* note 2, at 406 ("In a classic example of industry self-regulation, members of the (USGBC), composed of representatives of all segments of the U.S. building industry, developed consensus-based national standards for use in constructing high-performance, sustainable buildings.").

This Article concludes by explaining that a city, once having adopted a LEED-based green building ordinance, will falsely believe that it has sufficiently addressed its environmental concerns. In reality, this "solution" sticks a band-aid on a major wound, calls the process successful, and stops there. To avoid such a problem, this Article poses alternative formulations for private municipal green building ordinances: If cities are going to create a green building regime based on requirements, rather than incentives, they should promulgate those requirements locally, taking into account specific local building-related and environmental concerns. Moreover, the development should take place under the auspices of public governmental bodies, not private, industry-based organizations. Using these methods will result in a green building requirements regime that ensures stronger protection against climate change and local environmental harms, as well as a transparent and democratic governmental process resistant to industry capture.

II. FEDERALISM AND THE GLOBAL COMMONS–THE APPROPRIATE SCALE OF GREEN BUILDING REGULATION

A. *Legal Background: A Local Government's Ability to Regulate*

Land use is an area of the law traditionally regulated by local governments through zoning, planning, subdivision, or building codes.[17] A municipality is able to regulate an individual's use of her land via its police power.[18] Historically, governments use their police power to restrict private rights in the interests of health, safety, morals, and general welfare.[19] Municipalities apply this police power to private real property through zoning and building codes.[20]

Notwithstanding their police power, local governments are still subject to sometimes ineffective national and state initiatives. However, with respect to the issue of climate change, for example, little cohesive action has been taken at either the federal or state level to combat the problem. Building practices, which contribute to climate change, also contribute to numerous local environmental issues, including air and water quality, stormwater management, and landfill space for construction waste, to name a few. Thus, local governments have begun to step in to tackle these issues.

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17. ELLICKSON & BEEN, *supra* note 9, at 34.

18. *See* Berman v. Parker, 348 U.S. 26, 32–33 (1954). The police power offers sufficient justification for governmental involvement in and oversight of green building requirements. *See* Circo, *supra* note 11, at 744.

19. *Berman*, 348 U.S. at 32–33 ("The concept of public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary.") (internal citations omitted).

20. ELLICKSON & BEEN, *supra* note 9, at 86.

Local zoning regulations were initially created to address public health issues in growing cities.[21] Similarly, the new trend of requiring green building elements in the construction of new buildings is grounded in health concerns for both citizens and the environment, resulting from climate change as well as a variety of local environmental externalities related to building construction.[22]

B. *Scale: International, National, or Local Regulation*

Before considering the twin goals of efficacy and legitimate process, various issues of scale must be examined to determine what level of government is best suited to impose green building requirements on private developers, including the scale of externalities (local, regional, national, and global) and the scale of expertise (national problems require experts with nationwide experience, whereas local problems require local knowledge and experience). Although the larger issue of concern, climate change, is certainly an international problem, the burdens placed on developers and a building's impact are inherently local issues.

1. An International or National System Will Not Sufficiently Address Local Environmental Impairments

If you were to ask local government officials why their cities adopted green building ordinances, you would likely hear that they wanted to be at the vanguard of the environmental and climate change reduction movements.[23] Indeed, as one commentator notes, "[t]he key underlying

21. *See, e.g.*, § 1 of the Standard State Zoning Enabling Act passed by Hoover's Commerce Department in the early decades of the twentieth century which stated,

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

22. *See, e.g.*, PASADENA, CAL., MUN. CODE tit. 14, § 14.90.020 (2009), *available at* http://library.municode.com/index.aspx?clientID=16551&stateID=5&stateName=California. ("[I]t is the purpose of this [Green Building Practices] chapter to . . . [i]mprove the health of residents, visitors, and workers by counteracting negative environmental impacts associated with building construction and occupation."); SAN FRANCISCO, CAL., BUILDING CODE ch. 13C, § 1301C (2009), *available at* http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:sf_building ("The purpose of this chapter [imposing green building requirements on private development] is to promote the health, safety and welfare of San Francisco residents, workers, and visitors by minimizing the use and waste of energy, water and other resources in the construction and operation of the City and County of San Francisco's building stock and by providing a healthy indoor environment.").

23. *See also* PALO ALTO, CAL., MUN. CODE, ch. 18.44 (2009); Palo Alto, Cal. Ordinance No. 5006 (June 2, 2008), *available at* http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?blobid=17719 ("The City's Climate Protection Plan (CPP) . . . identifies green building as an important approach to reducing greenhouse gases generated in the Palo Alto community. The CPP

issue motivating green building work[] is the threat of climate change."[24] Buildings account for approximately 39% of all energy used in the United States, 38% of greenhouse gas emissions, 40% of raw materials used, and 14% of potable water consumption.[25] Further, it is undeniable that climate change is a problem of global proportions.[26] This has led some legal commentators to state that only a global-level approach can solve this global problem, and thus local governments (and even states or individual countries) should not take independent action without an international mandate in place.[27]

Support for this bias against local action in the climate change context is typically supplied by two theories: (1) the "Matching Principle," which holds that "the size of the geographic area affected by a specific pollution source should determine the appropriate governmental level for responding to the pollution" and suggests that international action is required to address the global climate change crisis;[28] or (2) a "race to the bottom" theory—a concern that, in the absence of an international or federal requirement, state and local governments will lower the level of environmental protection that is required by industries within their jurisdictions in an attempt to attract those industries.[29]

These theories, which have been thoroughly analyzed in the literature with respect to environmental pollution,[30] are underpinned by a general

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notes that building construction and maintenance accounts for approximately 38% of U.S. greenhouse gas emissions (U.S. Department of Energy) and approximately 40% of the energy use in the Palo Alto community. Buildings also account for much of the 14% of emissions that are generated by waste materials.").

24. Bradford Swing, *Project-Based Policy Development: Building the Case for Boston's Green Building Policy*, 11 N.Y.U. J. LEGIS. & PUB. POL'Y 33, 50 (2008).

25. U.S. Green Bldg. Council, Green Building Facts 1 (2009), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=5961.

26. Engel & Saleska, *supra* note 7, at 184 (referring to climate change as "perhaps the foremost global commons problem facing the world today").

27. Engel & Saleska, *supra* note 7, at 187; Robert N. Stavins, *Policy Instruments for Climate Change: How Can National Governments Address a Global Problem?*, 1997 U. CHI. LEGAL F. 293.

28. Butler & Macey, *supra* note 12, at 25 (noting that the geographic size determines the level of governmental spending as "[t]here is no need for the regulating jurisdiction to be larger than the regulated activity"); *see also* Engel & Saleska, *supra* note 7, at 187.

29. Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race-to-the-Bottom" Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210, 1210 (1992); Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196, 1212 (1977).

30. *See generally* David E. Adelman & Kirsten H. Engel, *Adaptive Federalism: The Case Against Reallocating Environmental Regulatory Authority*, 92 MINN. L. REV. 1796 (2008) (discussing race to the bottom and Matching Principle, ultimately rejecting Matching Principle in favor of an adaptive model for environmental regulation); Jonathan H. Adler, *When is Two a Crowd? The Impact of Federal Action on State Environmental Regulation*, 31 HARV. ENVTL. L. REV. 67 (2007) (discussing race to the bottom theory as a factor that affects a state's regulatory scheme); Butler & Macey, *supra* note 12 (criticizing race to the bottom theory and developing Matching Principle); Stewart, *supra* note 29 (reflecting seminal work arguing in favor of federal

"tragedy of the commons" argument: rational, individual local governments should have no incentive to take action against climate change when that action will not have a measurable impact on the larger climate change problem and will instead result in a decrease in their benefits from the commons because they have to bear the costs of the regulations.[31] While there is general consensus about these issues in the broadest sense, some commentators suggest that unilateral action against climate change by actors on a smaller scale can still make sense.[32]

Although buildings certainly contribute to the global climate change problem, they more specifically and immediately result in local environmental externalities, including sedimentation and erosion caused by runoff, landfill overuse due to construction and demolition debris, and deleterious effects on public health.[33] These intrinsically local problems vary from area to area and thus require a localized understanding of and expertise about how buildings relate to and impact the local environment. Indeed, both the Matching Principle and the race to the bottom theory can be used to support this assertion.

2. The Matching Principle and Local Action

The Matching Principle holds that the regulating jurisdiction should not be larger than the regulated activity.[34] When addressing problems of climate change, most commentators focus on global warming as a global concern and reason that an international (or at least national) response is necessary.[35] However, Henry Butler and Jonathan Macey, who devised the Matching Principle, believed that "many important environmental problems are problems of purely local concern, and should be regulated at the local level."[36] In fact, when there are "purely local externalities," Butler and Macey state unequivocally that those should be dealt with locally.[37]

Determining whether the externalities that result from buildings are

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environmental regulation, pointing out a race to the bottom as one rationale in favor of the centralization of policy).

31. Engel & Saleska, *supra* note 7, at 190–91.

32. Engel & Saleska, *supra* note 7, at 188; *see also* Michael P. Vandenbergh, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 UCLA L. REV. 913, 964–65 (2007) ("[T]he national and international public law regime on its own has been unable to address a number of environmental problems that pose grave threats. . . . Development and enforcement of multilateral international regulatory requirements has been difficult.").

33. These are costs that are external to the builder or developer, and are often entirely absorbed by the locality.

34. Butler & Macey, *supra* note 12, at 25.

35. Engel & Saleska, *supra* note 7, at 187 ("With respect to global environmental problems such as global climate change or ozone depletion, the 'matching principle' calls for an international framework of response . . . .").

36. Butler & Macey, *supra* note 12, at 26.

37. Butler & Macey, *supra* note 12, at 32.

purely local is difficult because buildings do not fit neatly into the silo of ambient environmental polluters that are traditionally analyzed under these theories. Stationary sources of pollution, such as factories releasing sulfur dioxide or landfills that cause seepage and groundwater pollution, directly contribute to local externalities in ways that buildings do not. Further, those types of polluters exist and regulations aim to reduce their pollution contribution, whereas green building requirements are forward-looking, and dictate the way that new (currently non-existing) buildings will be constructed. However, by looking at existing green building regulations and which features of buildings they seek to change, we can work backwards to discover some of the environmental harms that result from buildings and that have an impact on those not receiving any benefits from the buildings.

Traditional, older, "non-green" buildings often negatively impact localities in numerous ways. In drought-prone areas, older buildings with leaky sinks and a lack of low-flow plumbing fixtures use water in unsustainable ways. Similarly, over their lifetimes, older buildings consume dramatically more energy than new, energy-efficient buildings—especially new green buildings designed with energy-conservation principles in mind.[38] Additionally, many older buildings contain paints and coatings with high levels of Volatile Organic Compounds (VOCs), which negatively contribute to indoor air quality, and thus adversely impact the health of building occupants.[39] Further, in many cities, buildings have been located and positioned in ways that result in substantial shadow impacts, thus depriving citizens of the sun.[40]

New building practices also result in substantial environmental externalities. In many localities, instead of locating large commercial buildings downtown, zoning codes place them in suburban corporate campus environments, isolating them from homes and parks.[41]

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38. Interestingly, buildings located in different parts of the country have different levels of CO_2 emissions based on the source of their electricity. Many buildings in the Northwest use electricity produced from hydropower, which results in fewer CO_2 emissions than many buildings in the Midwest that use electricity from coal. *See* Energy Star, Carbon Emissions from Building Energy Use, http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager_carbon (last visited Jan. 24, 2010).

39. Environmental Protection Agency, An Introduction to Indoor Air Quality, http://www.epa.gov/iaq/voc.html (last visited Jan. 24, 2010). Some might question whether this is actually an externality, as the building occupants do also obtain some benefits from use of the building. However, the building occupants, such as workers, do not get any of the profits from purchasing or owning the building. Thus, their sufferings are properly considered externalities.

40. To avoid this problem, some localities require shadow studies prior to approving a project. *See, e.g.*, CITY OF LOS ANGELES, CEQA THRESHOLDS GUIDE A.3-2 (2006), *available at* http://environmentla.org/programs/Thresholds/A-Aesthetics%20and%20Visual%20Resources.pdf ("A project impact would normally be considered significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours. . . .").

41. Charles Lockwood, *Building the Green Way*, HARV. BUS. REV., June 2006, at 129, 132.

Commercial buildings so located are typically far from public transit, requiring multiple individual car trips in order to reach the buildings, which in turn contributes to the consumption of more fossil fuel and emissions release.[42] These buildings also often seem inauthentic, resulting in areas that lack a sense of place.[43] Finally, an abundance of waste results from the construction of new buildings, most of which is not recycled or reused, and thus ends up in local landfills.[44] These are only a few of the many types of local environmental externalities that buildings impose on citizens living in or near them, which cities would like to eliminate or decrease via the imposition of green building requirements.[45] Because these building-related externalities are inherently local, pursuant to the Matching Principle, they should be addressed at the local level. Moreover, as evidenced by the chart below, the scale of local environmental externalities caused by buildings swamps those at the regional, national, and global levels.

A Sample of Building-Related Environmental Externalities[46]

Local	Regional	National	Global
High and inefficient water usage by older buildings depletes a locality's water supply	Air quality impacts due to automobile travel to and from buildings	Depletion of naturally occurring building materials, including forests	Climate Change/greenhouse gas emissions
Local stream and river quality impacts due to effluent and	River quality impacts due to	Manufacture and transportation of	

42. *Id.* at 132.

43. Studies have shown negative psychological impacts on workers and worker satisfaction as a result of their physical surroundings. In contrast, studies show that workers in green buildings are typically happier and healthier, both physically and mentally. *See id.* at 130 (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).

44. *See id.* at 129 (discussing the benefits of green building over standard building because green construction recycles building waste).

45. As an example, the "driving force" behind Washington D.C.'s adoption of a private green building requirement was to improve their local environmental conditions, including heat island effect, stormwater runoff contributing to deplorable river quality conditions, and poor air quality. Telephone Interview with Zach Dobelbower, D.C. Neighborhood Planning Coordinator, Ward 2 Member of Green Building Task Force (Oct. 9, 2008); *see also* PALO ALTO, CAL., MUN. CODE, ch. 18.44 (2009); Palo Alto, Cal. Ordinance No. 5006 (June 2, 2008), *available at* http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?blobid=17719 ("[G]reen building design, construction, restoration, operation, and maintenance can have a significant positive effect on energy, water, and resource conservation, waste management and pollution generation, and the health and productivity of a property's residents, workers, and visitors over the life of a building and/or site.").

46. As the title of this table makes clear, it contains only a sample of the myriad externalities that result from building construction. Further, though some of the externalities listed as local may, on a larger scale, result in additional regional externalities as well, those effects would be minimal in relation to the substantial local effects.

stormwater runoff (including runoff from roofs that contain asbestos or petroleum materials)	effluent and stormwater runoff	synthetic building materials	
Runoff from synthetic materials is faster than runoff from natural surfaces, resulting in more erosion and sedimentation			
Development near groundwater recharge areas results in groundwater pollution			
Buildings consume large amounts of available local energy supply			
Local zoning results in separation of uses, necessitating automobile trips, resulting in consumption of local supplies of petroleum and release of emissions			
Local zoning results in uses that are far from public transit, necessitating automobile trips, resulting in consumption of local supplies of petroleum and release of emissions			
Local zoning results in separation of uses, which results in construction of more, longer, and less efficient infrastructure, which uses more materials (pipes, concrete) and causes more construction impacts			
Local zoning may result in communities that lack a sense of place due to the location of buildings and mix of uses			
Indoor air quality impacts due to high-VOC paints and coatings			
Construction and demolition waste winds up in local landfills			
Heat Island Effect			

Of course, not every city's buildings have these same problems. For example, cities in the wet Pacific Northwest have fewer water conservation concerns for their buildings than do cities in the dry Nevada desert. Similarly, the Manhattans and San Franciscos of the country do not have corporate campus-type developments within their city limits that are far from public transit. The opposite is true for suburbs like Alpharetta, Georgia or Round Rock, Texas. These distinct characteristics further illustrate the need for local, individualized regulation to alleviate specific, local environmental concerns.

Thus, any attempt to apply a nationwide green building "solution" to these problems would result in cities with fewer building-related

externalities being forced to bear the same costs as those cities with more problems without receiving the same corresponding benefits.[47] This is an inherent problem with reliance on a uniform nationwide set of green building standards: the fundamental determinations of what constitutes a "green building" will be decided by a single entity without any specific consideration given to the unique environmental, social, and political concerns of different localities. To prevent the development of new buildings that continue to contribute to these localized externalities, local governments should develop individualized green building programs that seek to address and avoid their local problems as well as the larger problem of climate change.

In summary, requiring a single building to incorporate green elements may reduce local environmental externalities, but it will not reduce levels of global warming because the impact would be so small as to be de minimis. On the other hand, national regulation aimed at all buildings is not tailored enough to address specific local environmental externalities, but it might reduce levels of global warming. However, as evidenced by the chart above, a desire to minimize the large number of local environmental externalities that result from buildings gives local governments a strong enough incentive to take action themselves to require more environmentally friendly building construction practices.[48] This self-interest on the part of localities will solve any coordination problem, and the positive aggregate impacts on climate change resulting from these green building ordinances will piggyback onto the specifically local benefits.[49] Thus, we must consider the localized benefits of green building, such as conserving local supplies of water and energy, encouraging the use and reuse of local building materials and supplies, contributing to better indoor and outdoor environmental air quality, healthier city residents, and happier building occupants.[50] These are inherently local responses to purely local concerns, and thus, pursuant to the Matching Principle, a local regulatory scheme should address these issues.[51]

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47. Butler & Macey, *supra* note 12, at 55.

48. This is, perhaps, the reason that so many municipalities have begun to voluntarily adopt green building ordinances.

49. Although a global or national solution to climate change will not necessarily have any positive impacts on local environmental problems, a local solution to environmental problems will, in the aggregate, have a positive impact on larger, global problems.

50. Building design impacts not only a city's form, but also its energy consumption, the health of its indoor air, and the people who work and live in these buildings. *See* Lockwood, *supra* note 41, at 130.

51. Butler & Macey, *supra* note 12, at 31 ("Allocation of regulatory authority over local externalities to local governments allows decisions to be made by the representatives of the citizens who benefit the most from and pay the most for higher environmental quality.").

3. The Race to the Bottom and Local Action

Notwithstanding the Matching Principle, one justification often used to support a larger, national approach to environmental concerns (instead of a piecemeal local one) is that of preventing a "race to the bottom."[52] For example, if City A passes a strict, local, environmentally related zoning ordinance, but City B does not, a developer would have an incentive to take her business to City B to avoid having to comply with City A's ordinance, thereby saving herself money.[53]

Race-to-the-bottom theorists hold that national regulations equally applicable to all regulatees, regardless of location, avoid this problem.[54] Thus, one possible benefit of a national green building standard would be that it would alleviate the race to the bottom.[55] Similarly, a nationally-promulgated green building standard would equalize green building requirements. This would be good because it would normalize developers' expectations; they would understand what a "green building" was and if they built one in City C, they could follow the same methods in City D. Further, national standards would benefit building product manufacturers, who often sell their products on a national market, and would benefit builders who work across regions or nationwide.

Despite these purported benefits of federal-level environmental and green building regulation, literature also suggests that the race to the bottom is not, in fact, determinative, and that states and cities will enact stringent regulations even when a federal mandate is lacking.[56] Indeed, an individual or industry is not solely concerned with the taxes it will have to pay and expenses related to building standards, but also with what "bundle of services" it will receive from locating in a city, such as open space, public services, and cultural opportunities.[57] Further, commentators have noted that local governments do not all reason in the same way when

52. This theory suggests that federal environmental regulation is necessary to prevent states, who are in competition for industry, from setting pollution control standards that are not stringent enough; "a race from the desirable levels of environmental quality that states would pursue if they did not face competition for industry to the increasingly undesirable levels that they choose in the face of such competition." Revesz, *supra* note 29, at 1210. The theory is also used as a basis for declaring local environmental regulation as inadequate. *See* Butler & Macey, *supra* note 12, at 34.

53. This would result in a loss of jobs and tax revenue to City A, which would then consider repealing the strict ordinance. *See* Revesz, *supra* note 29, at 1216.

54. Revesz, *supra* note 29, at 1217.

55. Revesz, *supra* note 29, at 1217.

56. Revesz, *supra* note 29, at 1233 ("[T]here is no support in the theoretical literature on interjurisdictional competition for the claim that, without federal intervention, there will be a race to the bottom over environmental standards."); Aseem Prakash & Matthew Potoski, *Racing to the Bottom? Trade, Environmental Governance, and ISO 14001*, 50 AM. J. POL. SCI. 350, 352 (2006) ("While NGOs typically claim races to the bottom are quite common, scholars have found little empirical support for them.") (citations omitted).

57. Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416, 419 (1956), *available at* http://www.jstor.org/stable/1826343.

imposing environmental standards.[58] Thus, with respect to green buildings, the race to the bottom does not provide determinative support for an exclusively national or international regime.

Typically, developers choose locations for specific, economic-driven reasons. A building located in San Francisco will likely be more expensive to permit and erect than a building constructed in Bowling Green, Kentucky. However, the building in San Francisco will also be able to take in higher rents, will likely have a higher occupancy rate, and will be situated in a location that provides access to numerous public parks, transit, and cosmopolitan and business opportunities. This illustrates the importance that locality plays when a developer is making a decision about which market to enter. Unlike pure environmental pollution regulations, green building ordinances are, at base, land use regulations. The race to the bottom justification for federal environmental laws has never gained much traction in suggesting that land use regulation should be conducted at a national level. This is because land use issues are inherently local issues, impacting citizens in ways that sweeping environmental legislation (and problems) does not. Thus, unlike some other types of environmental issues that could conceivably result in a race to the bottom, because locality is so important to the construction of buildings, local regulations are more favorable than national ones.[59]

Despite the line of theorists that point to global and national-level solutions to the problem of climate change, the foregoing analysis supports a conclusion that local government regulation is more appropriate to handle the more nuanced, specifically local externalities that buildings force onto their local communities.[60] This local emphasis comports with

58. Butler & Macey, *supra* note 12, at 43–44 ("Localities have different preferences for environmental quality, for a variety of economic and aesthetic reasons, and it is not at all clear that competition between jurisdictions will lead to a lower level of environmental quality than would a national median voter model.").

59. Indeed, if we look at the way green building regulations are playing out in cities and counties across the country, we see no evidence of a race to the bottom. In the nascent green building arena, cities are requiring green buildings from private developers in the absence of federal regulations. More generally, many states have set environmental regulations that are stricter than those imposed by federal environmental programs. *See, e.g.*, Clean Air Act § 209(a), (b), (e), 42 U.S.C. § 7543 (2006); Colorado Hazardous Waste Regulations, 6 COLO. CODE REGS. 1007-3, § 261.5(f)(3)(iv) (2009) (noting no onsite-disposal by conditionally exemptsmall quantity generators); *see also* Robert B. McKinstry, Jr., *Laboratories for Local Solutions for Global Problems: State, Local and Private Leadership in Developing Strategies to Mitigate the Causes and Effects of Climate Change*, 12 PENN ST. ENVTL. L. REV. 15, 16 (2004) ("[M]any states and localities are responding to the lack of federal leadership on the issue of climate change by establishing their own programs to limit emissions of greenhouse gases ('GHGs') and to sequester those gases.").

60. *See supra* Part II.B.2. (referencing table titled "A Sample of Building-Related Environmental Externalities" which demonstrates that there are numerous local externalities and a paucity of regional, national, or global ones).

traditional notions of federalism and is consistent with the Matching Principle.[61] Finally, as will be discussed in more detail below, local governments are in fact taking action to regulate these issues at a local level. However, this analysis also cautions that those local governments should refrain from importing nationally developed green building standards into their local codes without first taking into consideration the local externalities addressed above. To do otherwise is to allow national regulation of a predominantly local problem.

III. TAKE ME TO YOUR LEEDER: WHO DEVELOPED LEED GREEN BUILDING STANDARDS AND WHY?

A. *The United States Green Building Council (USGBC)*[62]

The USGBC was founded by building industry stakeholders who were interested in developing green buildings.[63] While membership today is more diverse, the organization is still primarily populated by building industry insiders.[64] LEED is a "Green Building Rating System;" a third-

61. Butler & Macey, *supra* note 12, at 53 ("Traditional federalism theory tells us that local government regulation should be preferred whenever appropriate so that regulations reflect the environmental-quality preferences of the affected parties, as well as to allow for jurisdictional competition and diversity."). The LEED approach removes the benefits of competition and diversity, and instead separates localities only based on whether they do or do not impose green building standards on private developments.

62. The USGBC is a 501(c)(3) non-profit corporation that was formed in April of 1993. DUN & BRADSTREET, CORPORATE FILING, U.S. GREEN BUILDING COUNCIL, INC. (filed Apr. 6, 1993) (on file with author). The organization's stated purpose is "transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life." About USBGC, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124 (last visited Feb. 9, 2010).

63. Certainly, it was a subset of the building industry that founded the USGBC—those who self-identify as "green." We cannot know whether these individuals truly wanted only the environmental benefits of a greener building industry, whether they saw a commercial advantage in being at the leading edge of this emerging green commodity, or whether they were just feigning an interest. Regardless, as will be discussed further below, these members of the building industry were still, on some level, motivated by private interest and bottom–line costs.

64. U.S. GREEN BUILDING COUNCIL, BYLAWS 4 (2008), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=1732.

> Membership in the Council is balanced through organizational representation by the following [twelve] membership groups ('Membership Groups'): 1) Building Product Manufacturers (including Building Controls Manufacturers/Building Operations and Maintenance); 2) Contractors and Builders; 3) Corporate and Retail; 4) Educational and Research Institutions (both public and private including K-12, colleges and universities); 5) Environmental and Non-profit Organizations; 6) Federal Government; 7) Finance and Insurance Community (institutions, appraisers, accountants); 8) Professional Firms (including, but not limited to architectural, engineering, consultants, legal, design and technical); 9) Professional Societies and Trade Associations; 10) Real Estate

party certification program created and administered by the USGBC.[65] A developer seeking LEED certification must pay the USGBC to register and certify its project and incorporate a number of checklist-based green elements into the building's design and construction.[66]

B. *The Development and Promulgation of LEED Standards by the USGBC*

To understand how the USGBC develops and adopts LEED standards, it is first important to understand the basic structure of the organization and the characteristics of those within it who create and implement the standards.[67] At the top of the LEED hierarchy, and working in conjunction with USGBC Staff and its Board of Directors (Board), is the LEED Steering Committee.[68] For issues that require technical expertise, the Steering Committee relies on USGBC's Technical Advisory Groups (TAGs)—the experts who are tasked with "maintaining consistency and technical rigor" as standards are revised and developed.[69]

> and Real Estate Service Providers (including building owners, developers, property managers); 11) State and Local Governments; 12) Utilities, ESCOs and Energy Service Providers.

Id. The organization has also grown; it now has more than seventy-five chapters throughout the United States. U.S. GREEN BUILDING COUNCIL, ABOUT USGBC 4 (2008), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=4896.

65. LEED POLICY MANUAL 5–6 (2008) *available at* http://www.usgbc.org/showfile.aspx?DocumentID=2039 [hereinafter LEED POLICY MANUAL].

66. *See* LEED Project Registration and Certification Fees, http://www.gbci.org/DisplayPage.aspx?CMSPageID=127 (last visited Jan. 24, 2010). The USGBC administers the LEED program with the help of LEED Accredited Professionals, or LEED APs, who are primarily building industry players (architects, project managers, contractors, engineers, etc.) who have taken the LEED AP Exam. *See* Green Building Certification Institute List of LEED APs by Area of Practice, http://gbci.cyzap.net/gbcicertonline/onlinedirectory/ (last visited Jan. 24, 2010). However, in fact, anyone can be a LEED AP if she has taken and passed the test; there are no other prerequisites. *See* LEED AP, http://www.gbci.org/displaypage.aspx?CMSpageID=84 (last visited Nov. 20, 2009).

67. The following paragraphs do not fully describe all USGBC or LEED-related committees, but rather those that contribute to the standard-making process. USGBC members are typically businesses, corporations, or other entities that are involved in the building industry in some way and have a commitment to using green building practices. For example, a quick member search on the USGBC's web site reveals various local government units, individual contracting firms, and educational institutes (ranging from local public school systems to large universities) that are members of the USGBC in the United States. *See* USGBC: Member Directory, http://www.usgbc.org/myUSGBC/Members/MembersDirectory.aspx (last visited Nov. 9, 2009) (search by Membership Category and Country).

68. The Steering Committee establishes and enforces LEED direction and policy, and generally oversees all LEED committee activities. LEED POLICY MANUAL, *supra* note 65, at 11–12.

69. LEED POLICY MANUAL, *supra* note 65, at 12. TAGs respond to relevant credit rulings and interpretations. *Id.*

Upon development of a new LEED standard, the USGBC creates a corresponding committee.[70] Any USGBC member with an interest in the new standard can be a member of the corresponding committee.[71] Corresponding committee members are not necessarily experts, but typically have an interest in the new product, and want to receive updates about its development.[72] The USGBC then recruits members for a core product development committee; this is the committee that will actually create the content of the new LEED standard.[73] Some members of the core committee are appointed while others are selected through a web-based election of corresponding committee members.[74]

Although the USGBC has a "Balance and Participation" policy, through which they "strive to involve different types of members in the discussions and consideration of proposed" new standards,[75] they do not require involvement of all member categories on all committees; rather, a requirement establishes that a "minimum of [five] member categories" will be represented on each LEED committee.[76] Thus, it is entirely possible that only building industry insiders could comprise a committee.[77]

In the context of creating a new LEED standard, the core committee receives input from the TAGs on creation of criteria.[78] Because TAGs are technical bodies, all members are appointed, based on their expertise, and there is no requirement that they contain a mix of membership categories.[79] Thus, all members of a TAG could be technical experts from within the

70. LEED Committees, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1750 (last visited Jan. 24, 2010).

71. *Id.*

72. *Id.* The corresponding committees can be unlimited in size. LEED POLICY MANUAL, *supra* note 65, at 14.

73. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL 6 (2006), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=2040.

74. *Id.* A call for nominees for appointment to a new core committee is made to the corresponding committee members. In the case of vacancies on an existing core committee, the members of that core committee will select and appoint the new member(s), with approval from the LEED management subcommittee and the Board's executive committee. LEED, COMMITTEE CHARTERS*:* 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 [hereinafter LEED COMMITTEE CHARTERS]

75. *Cf.* LEED, COMMITTEE CHARTERS, *supra* note 74, at 21–22.

76. *Id.*

77. For example, the following five member categories might be represented: Building Product Manufacturers; Contractors and Builders; Corporate and Retail; Professional Firms; and Real Estate and Real Estate Service Providers. Thus, no members from the government, education, or environmental categories would be able to contribute. LEED COMMITTEE CHARTERS, *supra* note 74 ("The TAGs are exempt from the need to demonstrate balance across member categories because their role is primarily technical and not market based").

78. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 6.

79. LEED COMMITTEE CHARTERS, *supra* note 74, at 21–22.

building industry.

LEED standards are purportedly created through a "consensus-based decision-making" process, which is described by the USGBC as one that "encourages members and any interested stakeholder to submit comments to committees."[80] Thus, once a core committee has created a draft of the new LEED standards in conjunction with the TAGs, the LEED Steering Committee and the USGBC Board must approve the draft for release for public comment.[81] The USGBC posts the proposed standards on its website, and members of the public (USGBC members and non-members) can make comments within a thirty-day period.[82] The USGBC then collates all comments received, responds to each, and revises the draft standards in response to the comments.[83] A revised draft and summary of comments and responses is posted online, and an additional fifteen-day comment period begins.[84] During this second comment period, the public may only comment on items that were revised based on the prior round of comments.[85]

Certain changes to the LEED standards, including adoption of new

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80. INFORMATION: CONSENSUS, USGBC POLICIES & GUIDELINES, *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=3350 (last visited Jan. 24, 2010). Additionally, "[t]he committee structure, with its balanced representation of stakeholders and conflict of interest policies, ensures that the development of LEED versions is consensus based and even-handed." LEED POLICY MANUAL, *supra* note 65, at 18. More generally, voluntary consensus standards bodies are defined as ones that have the following attributes:

> (i) Openness[;] (ii) Balance of interest[;] (iii) Due process[;] (vi) An appeals process[;] (v) Consensus, which is defined as general agreement, but not necessarily unanimity, and includes a process for attempting to resolve objections by interested parties, as long as all comments have been fairly considered, each objector is advised of the disposition of his or her objection(s) and the reasons why, and the consensus body members are given an opportunity to change their votes after reviewing the comments.

OFFICE OF MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, OMB CIR. NO. A-119, FEDERAL PARTICIPATION IN THE DEVELOPMENT AND USE OF VOLUNTARY CONSENSUS STANDARDS AND IN CONFORMITY ASSESSMENT ACTIVITIES § 4 (1998), *available at* http://standards.gov/standards_gov/a119.cfm.

81. LEED POLICY MANUAL, *supra* note 65, at 25.

82. Telephone interview with Deon Glaser, USGBC, Manager, LEED Technical Development (Oct. 10, 2008); *see also* LEED POLICY MANUAL, *supra* note 65, at 25.

83. LEED POLICY MANUAL, *supra* note 65, at 25.The LEED Steering Committee must approve revisions to the product or item. LEED POLICY MANUAL, *supra* note 65, at 25. Members of the Core Committees, which comprise the Steering Committee, or USGBC staff are responsible for responding to comments from Corresponding members, and should do so within 2-4 weeks of receiving the comment. LEED POLICY MANUAL, *supra* note 65, at 14.

84. LEED POLICY MANUAL, *supra* note 65, at 25.

85. LEED POLICY MANUAL, *supra* note 65, at 25. Most comments are received during the first comment period. For example, the first comment period for the most recent update to the LEED standards resulted in 5800 comments. The second round of comments only brought in 900 comments. Interview with Deon Glaser, *supra* note 82.

standards, require "balloting," or voting by the membership of the USGBC, to accept or reject the changes. Once the proposed change is ready for balloting, USGBC members receive an email notification and have thirty days in which to cast votes (each member organization receives one vote).[86] At least two-thirds of the votes cast must be affirmative in order for an action to pass.[87] This process was used to create the version of the LEED standards that are the focus of the remainder of this Article, and that have been adopted in a number of municipal green building ordinances: LEED Version 2.2 for New Construction.[88]

C. *What is LEED?*

The LEED process begins with a checklist.[89] For a building to become a LEED-certified green building, its developer must obtain a certain number of "points" by incorporating design elements from the checklist into its development project.[90] For new construction projects, points are awarded in five categories of human and environmental health.[91] Within each of the five areas, there are a number of "credits." A given number of points are available within each credit, and it is entirely up to the developer to determine which mix of credits (and how many points within each credit) she wants to achieve so long as those points combine to add up to the minimum number of points required for certification.[92]

The LEED version 2.2 program, which was created through the

86. LEED POLICY MANUAL, *supra* note 65, at 25. Unlike the comment period, which is open to all interested parties, voting to approve a new standard is limited to USGBC members. LEED POLICY MANUAL, *supra* note 65, at 25.

87. A quorum of 10% of USGBC members is required. LEED POLICY MANUAL, *supra* note 65, at 25.

88. On April 27, 2009, the USGBC launched a new LEED standard—LEED 2009. USGBC, FAQ, LEED Version 3, http://www.usgbc.org/ShowFile.aspx?DocumentID=5733 (last visited Jan. 24, 2010). The newly-enacted LEED 2009, consisting of updates and revisions to the LEED Rating System, is combined with a revision of the LEED certification process and enhancements to LEED Online to constitute LEED Version 3 (LEED v3). USGBC, LEED 2009 VISION & EXECUTIVE SUMMARY, http://www.usgbc.org/ShowFile.aspx?DocumentID=4121 (last visited Jan. 24, 2010) [hereinafter USGBC, LEED 2009 VISION & EXECUTIVE SUMMARY]. This new LEED system, however, "is not a 'tear down and rebuild' of the LEED that exists in the market but rather a reorganization of the existing LEED Rating Systems along with several key advancements." *Id.*

89. For the LEED checklist for New Construction version 2.2, see LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=3998 [hereinafter LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST].

90. *See id.*

91. Those five categories are Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Points may also be awarded for innovation and design process. *See id.*

92. Points are totaled to determine what level of LEED certification a project can receive. *Id.* For new construction pursuant to LEED version 2.2, the certification levels include Platinum (the highest, which requires between 52 and 69 points), Gold (39 to 51 points), Silver (33 to 38 points), and Certified (26 to 32 points). *See id.*

USGBC methods described above, provides a mix of prescriptive standards and performance-based points (though the former is much more predominant).[93] The Alternative Transportation Credit can be taken as an example of the credit and point system. Within LEED's Sustainable Sites category, up to four points are available under the Alternative Transportation Credit for the incorporation of certain alternative transportation design measures into a project.[94] One point is available for "Public Transportation Access," meaning that a project is located within 1/2 mile of an existing (or planned and funded) commuter rail, light rail, or subway station; or within 1/4 mile of at least one stop for at least two public or campus bus lines usable by occupants of the building.[95] A second Alternative Transportation point is available for "Bicycle Storage & Changing Rooms."[96] A commercial building can achieve this point by providing secure bicycle racks and/or storage within a certain distance from a building entrance for at least 5% of all building users and providing showers and changing facilities for 0.5% of Full-Time Equivalent occupants.[97]

D. *LEED Certification*

The USGBC's LEED certification program is quasi-judicial in nature: a developer seeking certification registers its project with the USGBC, presents documentation showing incorporation of various checklist elements, the USGBC makes a determination of compliance with those elements,[98] and there is an internal appeal process for those unhappy with

93. Prescriptive standards are those that tell a developer what he or she must do and how to do it. Performance-based standards set an end goal, but leave the method of achieving that goal to the developer. *See* OFFICE OF MGMT. & BUDGET, *supra* note 80, at § 3.

94. Under the LEED for New Construction version 2.2 LEED Green Building rating system, these are Credits 4.1, 4.2, 4.3, and 4.4. LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89.

95. LEED FOR NEW CONSTRUCTION & MAJOR RENOVATIONS, VERSION 2.2, at 12 (2005), *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=1095 (last visited Jan. 24, 2010). This is an example of a prescriptive standard, because the developer is given a clear path to achieving this point.

96. *See id.* at 13.

97. *See id.* This is also a prescriptive standard.

98. The USGBC has implemented new LEED standards, which went online in April 2009. *See* LEED POLICY MANUAL, *supra* note 65, at 25; *supra* note 88; *see also* LEED V3 ROLLOUT 1 (2009), *available at*, https://www.usgbc.org/ShowFile.aspx?DocumentID=5176. One of the major changes in the new version is that oversight of the certification process, which currently rests with the USGBC, will move to the Green Building Certification Institute and become compliant with the International Organization for Standardization (ISO). *See* News Release, USGBC, Certification Bodies Announced for LEED Green Building Rating System (July 29, 2008), *available at* http://www.usgbc.org/Docs/News/CBs%20072908.pdf. Further, certification will actually be administered by independent, third-party certification bodies including ABS Quality Evaluations Inc., BSI Management Systems America Inc., Bureau Veritas North America Inc., DNV Certification, Intertek, KEMA-Registered Quality Inc., Lloyd's Register Quality Assurance Inc., NSF-International Strategic Registrations, SRI Quality System Registrar Inc. and Underwriters

the determination.[99] After registering with the USGBC, a developer must submit project plans for both the design and construction of the project. After completion of the design phase of the project, the USGBC reviews the submittals and marks each checklist credit as either anticipated, pending, or denied.[100] Certain credits will also be selected for auditing.[101] Once the project has been constructed, USGBC will formally rule as to whether each credit has been "achieved" or "denied."[102] The USGBC makes these determinations based on documentation submitted by the project manager or LEED Accredited Professional on the project.[103]

The USGBC also has its own form of precedential decisions called Credit Interpretations Requests and Rulings (CIRs).[104] During design or construction of a project, a developer may be unsure whether a particular planned strategy will be sufficient to achieve a certain LEED credit. Thus, the developer may submit a Credit Interpretation Request, which a USGBC Technical Advisory Group will then consider and answer.[105] Interpretations determine whether a proposed action will satisfy the intent of the LEED credit requirement at issue, and thus enable the developer to achieve points under that credit.[106]

If after final certification review, a developer believes that it should

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Laboratories-DQS Inc. *See id.*; *see also* GreenerBuildings Staff, *USGBC Lists Certification Lineup for LEED 2009*, July 29, 2008, *available at* http://www.greenerbuildings.com/print/17754.

99. *See* LEED POLICY MANUAL, *supra* note 65, at 23–25 (detailing appeals process); *see also* Jonathan Riker, *The Green Zone*, L.A. LAWYER, Jan. 2008, at 33 (describing LEED as "a quasi-legal process that involves the presentation of evidence by applicants, a compliance determination, and an internal appeals process").

100. LEED POLICY MANUAL, *supra* note 65, at 22. The credits—and points under each credit—will not actually be granted until after the design phase is completed. GREEN BUILDING CERTIFICATION INSTITUTE, POLICY MANUAL, http://www.gbci.org/DisplayPage.aspx?CMSPageID=156#Application_Review_Policies (last visited Jan. 24, 2010) [hereinafter GREEN BUILDING CERTIFICATION INSTITUTE, POLICY MANUAL].

101. LEED POLICY MANUAL, *supra* note 65, at 22 ("[U]p to six prerequisites and/or credits shall be selected for audit.").

102. *See* GREEN BUILDING CERTIFICATION INSTITUTE, POLICY MANUAL, *supra* note 100. This is referred to as "Final Certification Review." LEED POLICY MANUAL, *supra* note 65, at 23.

103. *See supra* notes 65–66 and accompanying text (discussing LEED APs).

104. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 19.

105. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 19. "The Credit Interpretation Request (CIR) and ruling process was established for project applicants seeking technical and administrative guidance on how LEED credits apply to their projects and vice versa." U.S. GREEN BUILDING COUNCIL, GUIDELINES FOR CIR CUSTOMERS, *available at* http://www.usgbc.org/ShowFile.aspx?DocumentID=1510 (last visited Jan. 24, 2010).

106. The USGBC website maintains a database of former CIRs that is organized by credit and that can be searched to determine if a certain approach has already been questioned and analyzed. While they may provide guidance and information concerning an approach's applicability, CIRs do not ensure that points will actually be awarded. *See* LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 19.

have been awarded a credit that the USGBC denied,[107] LEED has a built-in as-of-right appeals process called Appeal Review.[108] If the credit is again denied after the Appeal Review, a "Final Appeal" is available.[109] At the Final Appeal stage, there is also opportunity for an oral presentation of evidence via teleconference.[110] The reviewing committee makes a recommendation to the Management Subcommittee, who then issues a Final Appeal Review determination.[111] That decision is final.[112]

E. *LEED as it Was Intended: The Normal Operation of LEED as a Private Voluntary Market Mechanism*

The USGBC created LEED as a voluntary leadership standard. In other words, it was created as a marketing tool. A developer, interested in portraying herself and her development project as "green" or environmentally friendly, registers with the USGBC, pursues the level of certification that suits her marketing needs and desires, and then represents herself as the developer of a "LEED Certified Green Building," evidenced by the LEED plaque that she places in the building's entryway.

Developers pay for the privilege of seeking (and hopefully obtaining) LEED certification for a number of reasons. The benefits of green buildings are well-documented and numerous.[113] They include environmental benefits, such as improved water quality, enhanced water conservation, better indoor and outdoor air quality, fewer landfilled

107. Because of the way the LEED system is currently structured, one point under a single credit can be the difference between a project that is Platinum certified (52-69 points) and one that is Gold certified (39-51 points), Gold and Silver (33-38 points), or Silver and Certified (26-32 points). LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89.

108. *See* USGBC, Certification, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1497 (last visited Jan. 24, 2010) [hereinafter USGBC, Certification]. A different review team than that which certified the project handles the appeal, which must be made within twenty-five days of the Final Certification Review determination. *Id.* Interestingly, USGBC staff does not perform credit review; it hires consultants who perform the actual review and award certification. LEED POLICY MANUAL, *supra* note 65, at 23. "USGBC staff will assign the appeal review to one of the consultants under contract to perform LEED certification reviews (appeal reviews will always be handled by a consultant different than the consultant who conducted initial review)." *Id.*

109. LEED POLICY MANUAL, *supra* note 65, at 23. The Management Subcommittee of the LEED Steering Committee assigns a review of the appeal to "the relevant Technical Advisory Group, the relevant Product Committee or to the Technical and Scientific Advisory Committee" depending on the issue that is being appealed. *Id.* at 23–24.

110. *Id.* This is the only time that the developer may verbally discuss its appeal in a formal setting; all other communications are made through letter or email. *Id.*

111. *Id.* at 24.

112. *Id.*

113. *See, e.g.*, Circo, *supra* note 11, at 731–32 (citing social, political, environmental, and business benefits of green buildings); Kingsley, *supra* note 11, at 536–42 (discussing, briefly, social benefits of green building and noting that such benefits "are numerous and well established in the literature").

materials than traditional construction, conservation of natural resources and building materials, and a general reduction in the many environmental externalities mentioned in the chart in Part I.B.2.[114] Green buildings also provide a number of purported economic benefits, especially to the end–user. These include reduced operating costs due to lower bills for heating, electricity and water; increased employee satisfaction and productivity; and the ability to charge more rent.[115] Studies also demonstrate that green buildings result in the improved health and comfort of building occupants.[116] Thus, a developer who "purchases" LEED certification is able to sell that brand to the building's tenants, purchaser, and financiers.

As a market-force-based product, LEED's checklist system makes sense. It allows a developer to internalize its cost-benefit analysis; determine what level of certification it wants to pursue (if it wants to pursue certification at all); and then decide how, through a combination of points, it wishes to achieve that certification level. Similarly, the USGBC's administrative processes[117] are appropriate and legitimate in the context for which they were created: LEED as a market-based mechanism. Specifically, the process provides an opportunity for developers who are interested in green building, and more pointedly, who are interested in seeking LEED certification, to join the USGBC and participate in the standards-creation and adoption process. Thus, they have an incentive to participate, notice and an awareness of the process, and an opportunity for voice. Importantly, they also have a complete opportunity for exit if they disagree with the final form of the standards that the USGBC promulgates because they can choose not to seek LEED certification for their building. As discussed below, this opportunity for exit is a key distinction that is lost in the translation of LEED from a private voluntary standard to a public mandatory one.

F. *Making LEED Standards Mandatory*

Because buildings contribute so substantially to environmental problems, including global concerns like climate change and local concerns like stream and air quality, a number of cities have focused their attention on regulating building construction and demolition as a way to improve environmental conditions. In many cities, green building requirements were originally only imposed on publicly-financed or municipal buildings.[118] Cities thought that if they were to lead by example

114. *See* A Sample of Building-Related Environmental Externalities Chart, *supra* Part II.B.2.; *see also* U.S. Envtl. Prot. Agency, Why Build Green?, http://www.epa.gov/greenbuilding/pubs/whybuild.htm (last visited Jan. 24, 2010).

115. U.S. Envtl. Prot. Agency, *supra* note 114.

116. U.S. Envtl. Prot. Agency, *supra* note 114.

117. *See supra* Part II.B.

118. *See, e.g.*, PORTLAND, OR., RES. NO. 35956 (2001) (Jan. 10, 2001), *available at*

and construct financially-feasible, successful, well-occupied green buildings, private developers might follow suit. In other locales, developers were given incentives such as fast-tracked permitting if they included green building elements in their project designs.[119] However, many cities have now decided that affirmative requirements are needed to effect real change in the building industry, and thus also have extended green building requirements to private developers, for private projects.[120]

Cities have begun to incorporate or refer to the LEED standards in their municipal codes (such as zoning, planning, or building codes). Some cities actually require developers to register with the USGBC and achieve a specific number of checklist points prior to the issuance of a building permit, certificate of occupancy, or other milestone.[121] Other cities only require proof of certifiability prior to the issuance of a permit.[122] Even in

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http://www.portlandonline.com/auditor/index.cfm?a=54355&c=34835 (reflecting adoption of Green Building Policy); PORTLAND, OR., RES. NO. 36310 (Apr. 27, 2005), *available at* http://www.portlandonline.com/shared/cfm/image.cfm?id=204110 (reflecting adoption of updated Green Building Policy); SEATTLE, WA., RES. NO. 30121 (Feb. 22, 2000), *available at* http://clerk.ci.seattle.wa.us/~scripts/nph-brs.exe?s1=&s2=&s3=30121&s4=&Sect4=AND&l=20&Sect1=IMAGE&Sect2=THESON&Sect3=PLURON&Sect5=RESN1&Sect6=HITOFF&d=RESN&p=1&u=%2F%7Epublic%2Fresn1.htm&r=1&f=G (reflecting adoption of Sustainable Building Policy).

119. SAN FRANCISCO PLANNING DEPARTMENT, PLANNING DEPARTMENT APPLICATION PROCESSING GUIDELINES, DIRECTOR'S BULLETIN NO. 2006-02 (2006), *available at* http://library.municode.com/index.aspx?clientId=16754&stateId=20&stateName=Maryland (stating that building projects that meet or exceed a LEED Gold Rating are deemed "Type 1" projects, which have a targeted timeline of initial review within two weeks, versus "Type 4" projects, which are entitled to no special procedures or timelines and may be considered out of order).

120. *See, e.g.*, ANNAPOLIS, MD., MUN. CODE, tit. 17, ch. 17.14 (2009), *available at* http://municipalcodes.lexisnexis.com/codes/annapolis/ (requiring LEED certification for all applications for new construction or major modifications to public buildings, single family dwellings, and certain residential, non-residential, and commercial buildings); CALABASAS, CAL., MUN. CODE, tit. 17, ch. 17.34 (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16235&sid=5 (adopting LEED v2.0 for "establishment, construction or replacement of privately-owned and city-owned, non-residential structures over five hundred (500) square feet;" requiring structures up to five thousand square feet to achieve LEED Certified rating and structures over five thousand square feet to achieve LEED Silver rating); SAN FRANCISCO, CAL., BUILDING CODE ch. 13C, § 1303C (2009), *available at* http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:sf_building (requiring LEED certification for all residential and commercial buildings in the City). These ordinances vary in form, but most apply to new commercial construction over a certain square footage. Some also apply to residential projects.

121. *See, e.g.*, PORTLAND, OR., RES. NO. 35956 (2001) (Jan. 10, 2001), *available at* http://www.portlandonline.com/shared/cfm/image.cfm?id=211352; PORTLAND, OR., RES. NO. 36310 (Apr. 27, 2005), *available at* http://www.portlandonline.com/shared/cfm/image.cfm?id=112682. This express delegation, requiring developers not only to comply with the LEED standards but allowing the USGBC to determine whether the developer has complied with those standards, appears to be an improper delegation of legislative authority. It also raises questions as to whether the USGBC can be considered a state actor. While these are very important questions, they are beyond the scope of this Article, and will not be discussed further.

122. As will be discussed in more detail later in this Article, municipalities are just beginning

these cities that only require a developer to demonstrate that its project *could* obtain LEED certification, were it to register with the USGBC, a target compliance level is typically set by the city. For example, the City of Rohnert Park, California allows new private commercial construction projects over 20,000 square feet to "self-certify,"[123] but requires that they demonstrate to a city building official that they have achieved enough points to reach LEED Silver level certification.[124]

G. *Why the Current Trend Makes Some Sense: The Benefits of Using an Existing Private Framework Instead of Creating a New One*

From an economic and resource preservation perspective, it is easy to understand why municipalities are beginning to require private developers to comply with the existing LEED framework, as opposed to creating their own municipal green building standards or even incorporating the text of the LEED standards into their own codes.[125]

Private standards are often used to develop public regulations.[126] For example, the National Technology Transfer and Advancement Act (NTTAA) requires federal agencies to adopt existing private sector

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to require (as opposed to encourage or reward) private developers to build green. Of those who have taken this step, almost all require compliance with the LEED standards. *See* BOSTON, MA., ZONING CODE art. 37 (2009), *available at* http://www.bostonredevelopmentauthority.org/zoning/downloadZone.asp; D.C. MUN. REGS. tit 6, § 6-1451.01 (2009), *available at* http://government.westlaw.com/linkedslice/default.asp?SP=DCC-1000. Further, registration with the USGBC and pursuit of certification is required by some. *See* PASADENA, CAL., MUN. CODE tit, 14, § 14.90.050(A)(1) (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16551&sid=5; TOWN OF BABYLON, N.Y., CODE ch. 89, art. VIII, § 89-86 (2009), *available at* http://www.ecode360.com/?custId=BA0924. However, most of these fledgling ordinances do not *require* the developer to actually obtain certification from the USGBC in order for building permits to be issued; rather, most provide that the developer must only show that she *could* achieve a specific level of certification if the project were to be registered with the USGBC and she pursued certification. *See* Edna Sussman, *Reshaping Municipal and County Laws to Foster Green Building, Energy Efficiency, and Renewable Energy*, 16 N.Y.U. ENVTL. L.J. 1, 10–12 (2008). Others require certification, but provide that it can be by an "equivalent" third-party certifier approved by the municipality's building director or other official. One reason for this is that the USGBC does not formally LEED certify a building until it has been constructed, whereas most green building ordinances require compliance with the LEED standards *prior* to the issuance of a building permit.

123. Self-certified means that a project sponsor has "submitted compliance documentation to the green building compliance official [a city building official] certifying that the project has met the standards specified in the [LEED] guidelines and has attained the compliance threshold . . . set forth by city council resolution." ROHNERT PARK, CAL., MUN. CODE tit. 14, § 14.50.020 (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16586&sid=5.

124. ROHNERT PARK, CAL., Res. 2007-09 (Feb. 27, 2007), *available at* http://www.ci.rohnert-park.ca.us/Modules/ShowDocument.aspx?documentid=426 (reflecting adoption of Green Building standards).

125. Sussman, *supra* note 122, at 10; Regulatory Scenarios Chart, *infra* Part V.B.

126. Jason Morrison & Naomi Roht-Arriaza, *Private and Quasi-Private Standard Setting*, *in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 498, 520 (Daniel Bodansky, Jutta Brunnée, Ellen Hey eds., 2007) ("[G]overnment agencies have for decades actively supported the integration of voluntary consensus standards into their [local] policies and activities.").

consensus standards whenever possible instead of creating in-house, non-consensus standards.[127] A memorandum addressing Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities[128] suggests that existing standards should be used for a number of reasons, including: (a) to eliminate costs associated with development of new standards; (b) to encourage standards that serve national needs; and (c) to work toward harmonization of standards. However, neither the NTTAA itself nor the memorandum addresses the deeper issue of whether publicly created standards provide benefits not present with privately created standards.

A more specific example of private voluntary standards finding their way into mandates is that of the International Organization for Standardization (ISO). ISO itself is a non-governmental organization that develops standards in a wide range of areas, including product specifications, health and safety, and the environment.[129] Although these private standards are presumptively voluntary, many countries have adopted them as national standards, and many ISO standards have become market requirements.[130] For example, pursuant to a new rule, all steel containers that arrive in the United States must be sealed so as to comply with the ISO Publicly Available Specification 17712 (ISO/PAS 17712), Freight Containers-Mechanical Seals standards.[131] This ISO standard avoids the need for the government to create its own high-security seal specifications.

This approach of applying an existing system is tempting for municipalities considering adoption of a green building ordinance as well. In many smaller cities or counties, a planning department may comprise one or two planners and a director of development, but the building department might have a plan checker and a building inspector.[132] It is somewhat infeasible to expect these few individuals, who often already

127. National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, §12, 110 Stat. 775, 782–83 (1996). However, the National Technology Transfer and Advancement Act (NTTAA) does not apply to state or local governments. *Id.*

128. OFFICE OF MGMT. & BUDGET, *supra* note 80, at § 1.

129. International Organization for Standardization, About ISO, http://www.iso.org/iso/about.htm (last visited Jan. 24, 2010).

130. Morrison & Roht-Arriaza, *supra* note 126, at 511.

131. Container Seals on Maritime Cargo, 73 Fed. Reg. 46029 (Aug. 7, 2008).

132. *See, e.g.*, Peter Barnes, *Valley Planners Overworked: Understaffing Results in Longer Waits for Permits*, THE SPOKESMAN-REVIEW, Mar. 10, 2007, *available at* http://www.spokesmanreview.com/tools/story_pf.asp?ID=178544 ("Currently, a staff of just seven people is laying out the future of Spokane Valley. Some of the planning work overlaps with the building department, which employs about 15 people."). However, some commentators have noted that the failure of a local government to allocate enough resources to handle these inherently local environmental externalities is a local problem, and relying on a national system is not the solution. Butler & Macey, *supra* note 12, at 48.

have very busy schedules and heavy workloads, to become knowledgeable enough about green building processes such that they could create and enforce a standard.[133] Even in larger municipalities, expecting a worker to add an entirely new area of knowledge to her daily tasks is difficult, and hiring additional employees is often not possible due to budget restrictions.[134] Further, using an established system allows a municipality's green building program to get up and running sooner than it otherwise would, especially in the case of LEED, as many developers are already familiar with the LEED standards.[135]

Another benefit of using an existing system such as LEED is that those creating the standards and administering the program are "experts."[136] Most city planners and building inspectors lack the expertise and experience in green building that a LEED-Accredited architect or engineer sitting on one of the USGBC standards committees has. Therefore, it makes sense that the standards promulgated by those experts would likely be more comprehensive and targeted than some created by city staff.[137]

Notwithstanding, it is indisputable that some planners and building inspectors, especially those in larger, progressive cities, have experience with green building design. For years, some cities have required some sort of "green" construction as either a condition of project approval or as a

133. "[T]he Board of Supervisors recognizes that the adoption of new standards without additional education and training for County staff responsible for enforcement of the standards can diminish compliance and potentially undermine the efficacy of this ordinance." MARIN CO., CAL., ORD. NO. 3492 (June 3, 2008), *available at* http://www.co.marin.ca.us/depts/BS/Main/BOSagmn/ordinances/ord-3492.pdf (codified at MARIN CO., CAL.CODE tit. 19, § 19.04.100 (2009)).The counterpoint to this argument is, of course, that smaller cities will likely have fewer permit applicants, and thus the staff might be able to find the time to take on this additional task. Similarly, a number of cities, big and small, have adopted green building ordinances that place compliance determination responsibilities on city staff. *See, e.g.*, ALAMEDA, CAL., MUN. CODE tit. 13, § 13-19.4 (2009), *available at* http://www.ci.alameda.ca.us/gov/municipal_code.html (requiring designation of a Green Building Compliance Official charged with "the responsibility to administer and monitor compliance with the [City's] green building requirements").

134. *But see* Sidney A. Shapiro, *Outsourcing Government Regulation*, 53 DUKE L.J. 389, 405 (2003) ("Although relying on private actors can save the government money, this choice can also increase the government's transaction costs when a transaction involves significant opportunistic behavior, incomplete contracting, and hold-up problems.").

135. "To enable rapid implementation, industry-established means and methods are employed." MAYOR'S TASK FORCE REPORT, SAN FRANCISCO, *supra* note 6, at Exec. Summary 1.

136. David M. Lawrence, *Private Exercise of Governmental Power*, 61 IND. L.J. 647, 656-57 (1986).

137. Such use of non-governmental experts has been recognized and supported by the Supreme Court, and thus is not inherently improper. *See* A.L.A. Schecter Poultry Corp. v. United States, 295 U.S. 495, 537 (1935) (stating Congress may seek private assistance in "matters of a more or less technical nature"). *But see* Daniel Bodansky, *Legitimacy in* OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 704, 720 (Daniel Bodansky, Jutta Brunnée, Ellen Hey eds., 2007) ("Yet technical expertise is rarely a sufficient basis for environmental decision-making. Most problems involve issues not simply of fact but also of policy and value.").

mitigation measure for other environmental impacts.[138] Thus, it would not be completely outside the realm of their experience and expertise to have certain planners and inspectors act as administrators and enforcers of these programs. Indeed, as noted above, many cities that now require private compliance with LEED standards do not rely on the USGBC to enforce the program.[139] Rather, some of these cities have the building inspector, or a newly designated employee confirm that the attempted LEED checklist points could likely be obtained if the project were to seek certification from the USGBC.[140]

While the benefits of using an existing system, such as LEED, are certainly real, they do not outweigh the clear legitimacy-related benefits that a publicly promulgated system provides, including a democratic, transparent process that supplies interested parties with notice and an opportunity for voice and exit. Nor do they outweigh the stronger environmental benefits that result from a locally, publicly derived set of standards.[141]

IV. REGIME DESIGN GOALS AND POSSIBILITIES: EFFICACY, LEGITIMATE

138. *See, e.g.*, California Environmental Quality Act, CAL. PUB. RES. CODE §§ 21000-21177 (2009), *available at* http://online.sfsu.edu/~mgriffin/CEQA%20CA%20PRC%2021000-21177.pdf (requiring public agencies to prepare environmental impact reports (EIRs) for specified projects indicating whether the project's environmental impact will be positive or negative and requiring the agency to attempt to mitigate harmful environmental effects to the extent possible). For an example of an EIR that incorporates green building-related mitigation measures, see UNIV. OF CAL,, CERTIFICATION OF THE FINAL EIR, FINDINGS, AND APPROVAL OF THE UNIVERSITY OF CALIFORNIA SANTA CRUZ 2005 LONG RANGE DEVELOPMENT PLAN, *available at* http://www.universityofcalifornia.edu/regents/regmeet/sept06/102attach8.pdf. Various mitigation measures can be found in this report, including requiring lighting for new projects to be compliant with the UC Regents' Green Building Policies and requiring design measure to maximize infiltration and dissipation of runoff, including permeable pavement and green roofs. *See id.* at 9.

139. ROHNERT PARK, CAL., MUN. CODE tit. 14, § 14.50.100 (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16586&sid=5.

140. *See, e.g.*, PASADENA, CAL., MUN. CODE, tit. 14, § 14.90.060 (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16551&sid=5.

141. Further, reliance on private standard-setting organizations to promulgate governmental regulations is generally frowned upon in the literature on the subject. *See* Michael T. Mishkin & David I. Adelman, *Gas Industry Standards Board: Legal Considerations in the Standard Setting Process*, 15 ENERGY L.J. 73, 77 (1994) (discussing Federal Energy Regulatory Commission's adoption of private standards, and noting that "in the absence of express Congressional authorization to delegate responsibilities to non-governmental bodies, concerns about abuse of power arising from an agency's delegation of authority to a private body would seem to make such delegations susceptible to challenge"); Shapiro, *supra* note 134, at 406 ("Reliance on private standard-setting organizations does not appear to be justified for most types of regulatory standards."). Notably, many cities have adopted building codes that were created by the International Code Council—a private entity. Those codes are vulnerable to many of the same objections raised in this Article. However, a salient difference between the status of public adoption of building codes and ISO standards on one hand, and adoption of LEED standards on the other, is that the former happened years ago, and commentators now recognize the problems resulting from that model of adoption, whereas the adoption of LEED standards is happening in the present; it is not yet a cemented practice. Thus, cities should learn from the problems and concerns that have accompanied adoption of other forms of private standards, and perhaps take a different path forward with respect to creation of green building ordinances.

PROCESS, AND GREEN BUILDING ORDINANCE SCENARIOS

A. *Regime Design*

Whenever a new regime or regulatory system is being designed, it is important to look beyond the status quo and determine how the system can be best crafted. It is also necessary to consider what the goals of that regime should be. I propose that there are two primary considerations or goals for any ordinance requiring private developers to construct green buildings. First is the goal of *efficacy*: ensuring that governments require environmentally sensitive, sustainable buildings that will effectively reduce local, negative externalities and combat climate change, so long as those buildings are cost-effective and feasible from a financial and physical construction standpoint. The second goal is that of *legitimate process*: ensuring processes that meet various criteria of transparency, democracy, notice, and an opportunity for voice and exit, and that are not dominated or dictated by the regulated industry. These goals cannot be accomplished via local adoption of a privately promulgated, nationally uniform, voluntary standard such as LEED. Rather, achieving these two goals requires individualized, locally created green building standards that are developed and enforced by public bodies, taking into account the needs and concerns of their specific localities.[142] A uniform system that is promulgated on a national level, or one that is promulgated or enforced by a private, building industry-controlled entity, will not sufficiently achieve either goal.

B. *Public Versus Private Regimes: Different Possible Regulatory Scenarios*

Green building regimes can be divided into six basic categories or scenarios. Under the *first* scenario, the local government (e.g., the city attorney or county counsel, in conjunction with the commissioners) promulgates an ordinance, which is adopted through a public hearing process. That ordinance is then enforced by the local government's code enforcement division, police force, or similar local department;[143] this is a "purely governmental" regime.

The *second* scenario involves wholesale governmental importation into its local code of standards that have been written by private entities.[144] In this scenario, local governments review the text of the regulations or

142. Of course, private standards can and should serve to inform locally developed green building standards.

143. *See* Shapiro, *supra* note 134, at 400 (discussing the "traditional model," wherein a federal agency writes a standard, adopts it via notice and comment rulemaking, and then enforces it through adjudication and remedy determinations).

144. *See* Shapiro, *supra* note 134, at 400 (referring to this as a form of contractual standard setting).

standards that have been promulgated by a private entity and then reproduce the text of those standards in their code. Under this "wholesale importation" approach, some local governments might slightly modify the text of the private standards to suit local needs. The local government itself then enforces these standards.

Under the *third* scenario, the government does not actually import the text of the privately promulgated standards into its code, but rather adopts an ordinance that references those third-party standards and requires compliance with them. This "incorporation by reference" regime can take one of two forms—a Scenario 3a "fixed import" model, where a government refers to a then-existing set of standards (e.g., applying LEED version 2.2, "which is in effect on the date of the adoption of this ordinance"),[145] or a Scenario 3b "mutable import" model, where a government references the existing version of the standard *and any future version* that may be passed and adopted by the promulgating entity.[146] The local government would enforce the Scenario 3 ordinances.

Scenarios four through six mirror scenarios one through three, but a private entity, instead of the government, makes the determination of compliance with the standards. Thus, the *fourth* scenario is that a local government promulgates its own regulations, but then contracts with a private entity to enforce them.[147] Under the *fifth* scenario, the standards are promulgated by the private entity, are imported into the local government's code, and are then enforced by the private entity. Similarly, under the *sixth* scenario (which also has subparts a and b), compliance is expressly required by reference to the private standards (fixed or mutable), and the standards are then enforced by the private entity.[148] Both the fifth and sixth approaches are pure industry self-regulation, although the *fifth* scenario,

145. *See, e.g.*, CALABASAS, CAL., MUN. CODE tit. 17, § 17.34.010 (2009), *available at* http://municode.com/resources/gateway.asp?pid=16235&sid=5 ("The Calabasas-LEED system is the United States Green Building Council's LEED Rating System Version 2.0.").

146. *See, e.g.*, PASADENA, CAL., MUN. CODE tit. 14, § 14.90.030 (2009), *available at* http://www.municode.com/resources/gateway.asp?pid=16551&sid=5 ("'LEED's Green Building Rating System (Rating System)' means the Leadership in Energy and Environmental Design Green Building Rating System approved by the United States Green Building Council (USGBC) *and as that Rating System may be amended from time to time by the USGBC.*") (emphasis added). This is an example of a Scenario 3b mutable import ordinance.

147. Shapiro, *supra* note 134, at 400. For example, a city could create its own green building code, but feeling that its staff was too small or lacked expertise, could hire a third party certification organization to determine whether builders were in fact complying with the ordinance. This scenario is not currently being used in the green building ordinance arena, and thus will not be discussed further.

148. *See, e.g.*, BOSTON, MA., ZONING CODE § 37-5 (2009), *available at* http://www.bostonredevelopmentauthority.org/zoning/downloadZone.asp (adopting LEED standards, requiring applicants to submit a completed LEED scorecard and "certification from a LEED Accredited Professional and/or other expert recognized by the Boston Redevelopment Authority").

wherein the local government has the option of revising the private standards to suit its local needs, is somewhat less troublesome.[149]

Regulatory Scenarios

<table>
<tr><th></th><th>Local Government Promulgates Standards</th><th colspan="3">Private Entity Promulgates Standards</th></tr>
<tr><td rowspan="2">Local Government Compliance Determination[150]</td><td rowspan="2">Scenario 1</td><td rowspan="2">Importation into Local Code (Scenario 2)</td><td colspan="2">Reference to private standards in Code (Scenario 3)</td></tr>
<tr><td>Fixed Import (Scenario 3a)</td><td>Mutable Import (Scenario 3b)</td></tr>
<tr><td rowspan="2">Private Entity Compliance Determination</td><td rowspan="2">Scenario 4</td><td rowspan="2">Importation into Local Code (Scenario 5)</td><td colspan="2">Reference to private standards in Code (Scenario 6)</td></tr>
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</table>

In the privately-applicable green building ordinance sector, Scenarios 2 and 3 are most common and Scenarios 5 and 6 less common. Scenario 1, however, would be most appropriate from both an efficacy and legitimate process standpoint. Scenarios 2 and 3 lack the level of legitimacy that inheres in Scenario 1 ordinances,[151] but these are not so troubling from an efficacy perspective, so long as the private industry promulgating the standards is not the same industry that they set out to regulate (e.g., buildings and development).[152]

The incorporation of private standards into local government codes and regulations is not entirely new, but it is in this format, where the promulgating agency is often also tasked with enforcing the code it has drafted. For example, the town of Babylon, New York, has adopted a Scenario 6b ordinance.[153] With respect to a compliance determination, the

149. Shapiro, *supra* note 134, at 400.

150. The enforcement here is referred to as a "compliance determination." As has been mentioned elsewhere in this article, *see supra* Part III.D., green building ordinances typically require developers to submit evidence that they would be eligible for LEED certification were they to register with the USGBC and seek certification. However, because that determination must be made in order to issue building permits or certificates of occupancy, it must be made prior to completion of the project (the USGBC makes its compliance determination after construction of a project). Therefore, this Article uses the term "compliance determination" instead of enforcement, because it is merely a determination that a project could, or will, be certified by LEED upon completion.

151. Legitimate process issues are addressed *infra* Part VI.

152. While enforcement by the same industry organization that created a standard raises a number of legal concerns, those will not be addressed in this Article.

153. BABYLON, N.Y., CODE § 89–84 (2008), *available at* http://www.ecode360.com/?custId=BA0924 (The Town of Babylon "hereby adopts, in principle, the [USGBC's] . . . Leadership in

Babylon ordinance requires that a project actually achieve certification from the USGBC.[154]

This is a different scenario than one referring to private codes that will then be *publicly* enforced. For example, the City of Pasadena, California, has adopted a Scenario 3b green building ordinance that requires private developers to comply with LEED standards.[155] However, that ordinance tasks Pasadena's planning director (or her designee) with making a compliance determination.[156] Regardless of the enforcement mechanism used, jurisdictions with ordinances following Scenarios 3 or 6 will fail to successfully fulfill the green building regime goal of a legitimate process.

V. EFFICACY AND THE CONTENT OF LEED-BASED GREEN BUILDING ORDINANCES

The first goal of a green building regime is efficacy. When municipalities determine what type of green building mandate to impose, they should balance costs. However, they also should ensure that the resulting green building will include enough authentic green elements so as to successfully reduce key local environmental externalities caused by buildings, and in the aggregate, combat global warming. The current trend of municipalities importing or referring to LEED standards in their codes as the benchmark for green buildings will not achieve the regime goal of efficacy.

A. *LEED Is a National Approach, But a Local Approach Will More Successfully Achieve the Goal of Efficacy*

Despite the arguments in favor of a national or international regulatory scheme for combating climate change generally, there is at least a strong argument that green building regulations should be promulgated at the

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Energy and Environmental Design for New Construction (LEED-NC) Rating System, Version 2.2, and, further, automatically adopts any future versions promulgated by the USGBC.").

154. *Id.* § 89-86(C), *available at* http://www.ecode360.com/?custId=BA0924. However, "a temporary Certificate of Occupancy may be issued until proof of [LEED] Certification is achieved. Prior to a temporary Certificate of Occupancy being issued, the applicant shall pay a fee to ensure successful completion of the Certification . . . . If the developer achieves Certification status, the fee paid shall be refunded." *Id.* § 89-87, *available at* http://www.brookhaven.org/DesktopModules/Bring2mind/DMX/Download.aspx?TabId=134&DMXMobule=1576&Command=Core_Download&EntryId=987&PortalId=0.

155. PASADENA, CAL., MUN. CODE § 14.90.050(A) (2008) ("The city shall adopt by reference the [USGBC] LEED™ . . . Green Building Rating System as the standard for which a project shall be measured as a green building.").

156. "The [planning director] shall: A. Verify LEED™ project registration and review the required LEEDTM checklist and supporting documentation prior to issuance of a grading or building permit. B. Verify that the building measures and provisions indicated on the project LEEDTM checklist . . . are being implemented at foundation inspection, framing inspection, and prior to issuance of a final certificate of occupancy." *Id.* § 14.90.060(A)–(B).

local level.[157] This approach comports with the general notion that land use regulation (of which green building regulation is certainly a subset) is an area of the law that is traditionally reserved to local governments.

Thus far, green building regulations have been at once both national and local in application. At the most general level, the LEED certification program promulgated by the USGBC is a national-level program: the standards are issued by a single entity located in Washington, D.C.;[158] there is a single system of credits that applies regardless of a project's location;[159] and the LEED-Accredited Professionals who administer much of the program take a single, national accreditation examination.[160] On the other hand, adoption of LEED standards and their imposition on private developers have taken place at a wholly local level.[161]

A regionally focused set of green building standards, however, will more successfully address local environmental concerns than would a nationally created set of standards such as LEED.[162] Throughout history,

157. *See supra* Part II.B.2.

158. *See* U.S. Green Building Council, About USGBC, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124 (last visited Jan. 24, 2010).

159. LEED does provide different slightly different credit rating systems based on the *type* of project at issue and the type of LEED certification that is sought (e.g., new construction versus neighborhood development versus schools).

160. *See* Green Building Certification Institute, About GBCI, http://www.gbci.org/DisplayPage.aspx?CMSPageID=19 (last visited Jan. 24, 2010).

161. *See* USGBC, LEED, LEED Rating Systems http://www.usgbc.org/DisplayPage.aspx?CMSPageID=222 (last visited Jan. 24, 2010). Certain federal agencies have adopted LEED requirements for their own construction projects, including the Departments of Defense, Agriculture, Energy, and State. *Id.* All new construction projects overseen by the U.S. General Services Administration, which manages a number of federal buildings, must be LEED certified. U.S. General Services Administration, Sustainable Design Program, http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=8154&contentType=GSA_OVERVIEW (last visited Jan. 24, 2010). Similarly, a number of states and local governments require that all new government buildings obtain LEED certification. Buildings, *America's Cities 'Leed' the Way*, May 2005, http://www.buildings.com/ArticleDetails/tabid/3321/ArticleID/2475/Default.aspx (last visited Jan. 24, 2010). However, no state or federal agency as of yet requires *private* compliance with LEED standards—only local governments have taken this step.

In July 2008, the California Building Standards Commission, which oversees adoption and implementation of building codes in California, adopted the California Green Building Standards Code. *See* Cal. Code Regs. tit. 24., pt. 11 (2008), *available at* http://www.documents.dgs.ca.gov/bsc/2009/part11_2008_calgreen_code.pdf. The standards apply to commercial and residential construction in both the public and private sectors. *Id.* § 101.3. Although currently voluntary, some elements of the Code are expected to become mandatory in 2010. *See* Michelle L. Moore, et al., *California Green Building Code Update: Coming to a Location Near You*, LEGAL UPDATES & NEWS (Morrison Foerster, LLP), Aug., 2009, at 1–2, *available at* http://www.mofo.com/news/updates/files/15827.html (last visited Jan. 24, 2010). Of note, the Code does not mention or rely on LEED standards, but instead creates its own green building requirements and checklist. *See* CAL. CODE REGS. tit. 24., pt. 11.

162. Further, as some commentators have noted, individual actors' efforts to decrease greenhouse gas emissions are not presumptively irrational. Engel & Saleska, *supra* note 7, at 207–

citizens have often relied on local governments to take action before the federal government has done so,[163] and green building ordinances are no exception; local governments, in the face of inaction and lack of consensus by the federal government, are the ones that are actually making strides in the effort to reduce both local environmental externalities and the impacts of global warming.[164]

1. LEED Points Are Not Regionally Weighted

A primary reason that a local approach to green building makes more sense than a national or international one is that flexibility in the application of regulations is important for efficaciously addressing regional environmental concerns and differences. Unlike federal or even state-level law, local governments need room for variation based on their unique localities and externalities.[165] However, local governments cannot maintain this flexibility while using the rigid and inflexible LEED standards,[166] which impose LEED's "checklist" format and its "one-size-fits all" solution.[167]

LEED's failure to account for regional differences embodies this rigid, one-size-fits all approach. For example, water protection measures that are implemented on a project in an area like Seattle, Washington, which has a wet climate and abundant rainfall, result in the same number of LEED

09 (pointing to economic studies that indicate that "a significant fraction of the emissions reductions that are needed to achieve efficient levels should be made unilaterally by countries acting in their own, rational self-interest").

163. For example, only state and local governments had been involved with organic food standards prior to the passage of the Organic Foods Production Act in the 1990 Farm Bill. *See generally* U.S. Environmental Protection Agency, Agriculture, Organic Farming, http://www.epa.gov/oecaagct/torg.html (last visited Jan. 24, 2010) (discussing the history of organic agricultural production and the development of national standards). Then, in 1992, the United States Department of Agriculture appointed the National Organic Standards Board and established the National Organic Program. United States Department of Agriculture, Agricultural Marketing Service, National Organic Program, http://www.ams.usda.gov/AMSv1.0/nosb (last visited Jan. 24, 2010).

164. Engel & Saleska, *supra* note 7, at 186 ("[S]tate and local governments are taking action on climate change despite the United States' decision not to participate in an international climate change agreement establishing fixed emissions reduction targets.").

165. Circo, *supra* note 11, at 778.

166. *See* Charles J. Kibert & Kevin Grosskopf, *Envisioning Next-Generation Green Buildings*, 23 J. LAND USE & ENVTL. L. 145, 150 (2007) (criticizing then-current version of LEED as being "rigid with respect to points, categories, and ratings and . . . is considered a 'one size fits all' approach to green building assessment"); Judith Lewis, *LEEDing the Pack: Why Our Green Standards Might not be Green Enough*, L.A. WEEKLY, Sept. 14, 2006, *available at* http://www.laweekly.com/2006-09-14/news/leeding-the-pack/1 (citing criticisms regarding the LEED system, including that the point system "makes some of its criteria meaningless" and "does not vary by region or climate").

167. Transcript: Proving a Building 'Green' Can Be Daunting (Nat'l Pub. Radio May 7, 2008), *available at* http://www.npr.org/templates/transcript/transcript.php?storyId=90259935.

points as those measures implemented on a project in the desert where water conservation is a much greater need. Similarly, a project that installs a green roof in an area with heavy rains, polluted rivers and streams caused by stormwater runoff, and heat island effect problems[168] is eligible for the same LEED points from the green roof as a project in a suburban area with none of these problems. Additionally, while points are given for using regional materials, those points are not weighted differently based on a region's lack or abundance of certain materials.[169] The point system's failure to account for regional differences demonstrates the problems with a national approach to green building and with the current municipal adoption trend. If local governments were to instead create their own green building ordinances, or were to use LEED as the basis of a code but modify it to suit their local needs, they could target regional concerns and make a greater number of points available for those "green" elements that would most directly target their local environmental externalities.

2. Modification of LEED for Local Purposes Is Cumbersome

Many of the local governments that have adopted private green building ordinances have expressly referenced[170] or incorporated wholesale[171] LEED Version 2.2 into their codes. However, because the USGBC claims that it "recognizes that LEED needs to be adaptable to meet the different needs of different markets in different locations," LEED does provide a mechanism for altering its standards if local governments choose to do so.[172] Currently, LEED provides for "supplement[ation]" or "adaptation[]" by local governments implementing LEED.[173]

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168. All of these problems can be alleviated by the installation of a green roof. Green roofs cool the surface of a building's roof, thereby resulting in lower temperatures in and around the building, thus reducing heat island effect. CYNTHIA ROSENZWEIG, STUART GAFFIN, & LILY PARSHALL, COLUMBIA UNIV. CTR. FOR CLIMATE SYS. RESEARCH & NASA GODDARD INST. FOR SPACE STUDIES, GREEN ROOFS IN THE NEW YORK METROPOLITAN REGION: RESEARCH REPORT 3 (Rosenzweig, et al. eds., 2006). Green roofs also capture rainfall, thereby reducing stormwater runoff. *Id.* at 3–4.

169. Note LEED Version 3 includes certain revisions that will alleviate some of these concerns. *See* USGBC, LEED 2009 VISION & EXECUTIVE SUMMARY, *supra* note 88, at 3–4. For example, the new standards incorporate Regional Priority Credits (RPC), which purportedly incentivize developers to pursue certain existing credits that focus on "geographically specific environmental policies," though only four bonus points are available for earning RPCs. USGBC, FAQ, Regional Priority Credits Frequently Asked Questions, http://www.usgbc.org/ShowFile.aspx?DocumentID=5732 (last visited Oct. 1, 2009). In spite of this change, as will be discussed in Part VI.A.2, a number of municipalities have locked in the LEED Version 2.2 checklist approach, and therefore will not be able to take advantage of this new flexibility without overhauling their green building ordinances.

170. *See supra* Part IV.B (Scenario 3 or 6).

171. *See supra* Part IV.B (Scenario 2 or 5).

172. LEED POLICY MANUAL, *supra* note 65, at 20.

173. LEED POLICY MANUAL, *supra* note 65, at 20.

Adapting LEED involves changing the actual LEED standard to improve the way it works for a certain location.[174] Specifically, local adaptations can tailor certain LEED prerequisites and credits to regional goals, policies, or needs; however, all LEED prerequisites must remain intact for projects that plan to apply for LEED certification from the USGBC.[175] Although they are permitted, the USGBC severely frowns upon adaptations and discourages local governments from implementing them.[176]

On the other hand, the USGBC seems to encourage local governments to supplement the LEED standards to meet local needs.[177] A supplement is a locally created document that sets out requirements that are new or different from those required by LEED; the supplement is separate and apart from the underlying LEED checklist.[178] These supplements are preferable to adaptations, according to the USGBC, because LEED and the local supplement may be independently modified, thus avoiding the need to change the LEED standards themselves.[179] Local governments could develop a supplement to LEED that modifies point weightings or creates additional credits, so long as those supplemental provisions are scored by the local government itself.[180]

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174. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 13.

175. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 13. Again, not all municipal ordinances require that the project actually obtains certification from the USGBC.

176. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 15 ("USGBC also strongly discourages the Adaptation of any LEED rating systems for local use."); LEED POLICY MANUAL, *supra* note 65, at 20 ("[A]daptation of LEED Rating systems for local use carries significant burdens and responsibilities for the adapting entity. USGBC considers it preferable and recommended that any adaptation to local conditions is done by means of a supplement to the basic LEED standard which of itself remains intact."); *see also* Shapiro, *supra* note 134, at 411 ("[T]o the extent that a politically powerful industry supports private standard setting, the agency may find it politically difficult to engage in extensive rewriting of private standards, although it has the legal capacity to do so.").

177. According to the USGBC, supplements to LEED "involve changes in point weightings, additional credits or modifications outside of [LEED's existing] flexibility mechanisms." LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 13–14. Adaptations to LEED, on the other hand, "entail making changes to the LEED standard itself to improve the way it works for the particular location." LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 13.

178. *See, e.g.*, OFFICE OF SUSTAINABLE DEV., CITY OF PORTLAND, LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) GREEN BUILDING RATING SYSTEM SUPPLEMENT 3 (2002), *available at* http://www.portlandonline.com/shared/cfm/image.cfm?id=119695 (providing that it was developed by the city "to identify both local and state codes that go beyond LEED requirements and additional green building strategies that are regionally significant.").

179. LEED POLICY MANUAL, *supra* note 65, at 20.

180. LEED POLICY MANUAL, *supra* note 65, at 20.The City of Boston has done something like this with its private green building ordinance. BOSTON REDEVELOPMENT AUTH., BOSTON ZONING CODE & ENABLING ACT art. 37 (2007), *available at* http://www.bostonredevelopmentauthority.org/pdf/ZoningCode/Article37.pdf. The ordinance has four "Boston Green Building Credits" via which a project can obtain points that are not included in the LEED checklist, but which Boston

Perhaps because supplements place additional burdens on cities,[181] or perhaps because most cities are not requiring developers to actually seek certification from the USGBC,[182] many cities that have imported or referenced LEED in their private green building ordinances have neither supplemented nor adapted it.

In sum, LEED is currently a de facto national program, even though local governments are requiring, and sometimes enforcing, it. Because LEED is promulgated by a single entity and makes available the exact same number of LEED points to a project that is located in Tempe, Arizona, as it does to one located in Portland, Oregon, it contains many of the problems that other national-level programs entail.[183] To meet the regime goal of efficacy, which requires addressing locality-specific problems of public health, welfare, and environmental pollution, green building programs should be designed at a local level.[184]

B. *Lost in Translation: Voluntary Leadership Standards Do Not Translate Well Into Law*

The USGBC designed LEED to be a voluntary leadership standard.[185] By their nature, "[v]oluntary programs are *non-mandatory codes of conduct* that actors, particularly businesses, *pledge* to apply to their *internal operations*."[186] The creation of voluntary standards for industry self-regulation inherently involves very different elements than does the creation of a law or statute to be imposed upon that industry by the government. Further, attempting to require implementation of voluntary

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believes are important in order to address its specific local environmental concerns. *See id.* § 37-4.

181. LEED PRODUCT DEVELOPMENT AND MAINTENANCE MANUAL, *supra* note 73, at 13.

182. Rebecca C. Retzlaff, *The Use of LEED in Planning and Development Regulation: An Exploratory Analysis*, 29 J. PLAN. EDUC. & RES. 67, 70 (2009) (noting that only twelve jurisdictions instituted requirements for certain developers to utilize the LEED assessment system).

183. *See supra* Part II.B.1 (discussing how national programs may not address local problems); *see also* Jonathan H. Adler, *Reforming Our Wasteful Hazardous Waste Policy*, 17 N.Y.U. ENVTL. L.J. 724, 727 (2008) (arguing that national-level policies regarding hazardous waste "impose extensive federal requirements . . . with little regard for local risk preferences, environmental priorities, or ecological conditions").

184. This approach will also allow for experimentation with different, alternative methods of regulation. Such experimentation would allow us to determine which methods work well, and which do not work at all, eventually leading to a better system. If all local governments adopt and implement LEED—the current trend—we will be deprived of having alternative approaches for comparison. *See* Peter H. Aranson, *Pollution Control: The Case for Competition*, *in* INSTEAD OF REGULATION: ALTERNATIVES TO FEDERAL REGULATORY AGENCIES 339, 384 (Robert W. Poole, Jr. ed., 1982).

185. *See* Michael D. Berrisford, *In Conversation with Kevin Hydes*, *in* WHO'S GREEN 25, 27 (Ecotone Publishing LLC 2007).

186. Matthew Potoski & Aseem Prakash, Do Voluntary Programs Matter? An Empirical Examination of ISO 14001 Adoption and Firms' Environmental Performance 1 (Apr. 15, 2004) (unpublished manuscript, http://www.allacademic.com/meta/p_mla_apa_research_citation/0/8/3/7/7/p83778_index.html) (emphasis added).

standards is counter-productive because it takes away the element of choice. The goal of efficacy would be better achieved through the creation of mandates that were intended as mandates from their inception.

Even where governments do not adopt voluntary standards into law, commentators have noted, "[v]oluntary environmental regulations make for challenging analysis, since the regulation and its impact really represents the outcome of three interdependent theaters of strategic action."[187] Those three theaters are: (1) potential regulatees have the choice as to whether they want to join in the agreement; (2) the terms of the voluntary standards are negotiated by members to the agreement; and (3) those adhering to the standards determine how to proceed.[188] As it was intended to operate, all three actions ring true for LEED. However, once governments decide to require compliance with those standards, (1) regulatees no longer have a choice as to whether they want to join (unless that choice is scaled back to the choice of whether or not to build a structure in the municipality); and (2) the LEED standards have already been set, and in most instances locked into the municipal law, without necessary participation by the new regulatee (of course, it is possible that the builder at issue could have been a USGBC member or contributed comments to the LEED standard adoption process, but this is by no means certain). As for theater (3), in some instances, private builders who are required by municipal law to comply with LEED standards still have some leeway in determining how to proceed. For example, though a local ordinance might require compliance with LEED standards at the LEED Certified level, a developer might choose to actually pursue certification from the USGBC and perhaps at the more stringent Silver or Gold level, instead of the Certified level.

One interesting issue that surfaces when private, voluntary LEED standards are non-discerningly translated into mandatory requirements concerns the timing of certification. When a developer voluntarily seeks LEED certification pursuant to LEED's intended operation as a market-based system, the project is not awarded LEED certification until it has been constructed.[189] One reason for this is that until a building is actually constructed it is impossible to determine whether certain points have been achieved, as a building's initial plans and its final layout are not always

187. NAT'L CTR. FOR ENVTL. RES., U.S. ENVTL. PROT. AGENCY, VOLUNTARY ENVIRONMENTAL STANDARDS: FURTHERING MORAL SUASION WHILE PREVENTING MORAL HAZARD (2001), http://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.abstractDetail/abstract/211/report/0.

188. *Id.*

189. GREEN BLDG. CERTIFICATION INST., POLICY MANUAL, http://www.gbci.org/DisplayPage.aspx?CMSPageID=156#Application_Review_Policies (noting that applicants must submit an application for construction review within two years of "substantial project completion"). While there are reviews along the way to determine whether credits or points are likely to be achieved, final determination is made upon completion. *Id.*

identical. Further, a few credits require a performance analysis of the building before the USGBC will conclusively determine that the building has earned those credits.[190]

Thus, official LEED certification from the USGBC might not issue for months or years after building construction has begun or even completed.[191] In the context of LEED as a market tool, this is not worrisome. A developer only needs to be able to conclusively represent that her project is LEED Certified when she is ready to "sell" it to a purchaser or user (be that a tenant, a building manager, or an owner). Again, by obtaining LEED certification, a developer can represent to others in the community that her building will provide a healthy, environmentally friendly, "green" place to live or work. This not only raises her standing in the eyes of environmentally conscious potential purchasers but also those of the environmentally conscious community members generally.

However, when a city borrows and mandates LEED standards, a timing issue arises, especially if the city requires private developers to obtain certification from the USGBC.[192] Many ordinances require proof of compliance with LEED standards prior to the issuance of a building permit, which is of course required prior to the start of construction. Thus, compliance with LEED has been transformed from an after-the-fact marketing tool to a before-the-fact hurdle.

There are additional inherent problems in making a leadership standard into code. For example, LEED *as a voluntary standard* will typically make sense for those who choose to adopt it and implement it in the construction of a building. However, due to the one-size-fits-all nature of LEED, it will not be profitable or feasible for every commercial building over a certain size to adhere to its standards. For example, LEED awards points based on a project's location, including points for proximity to transit hubs. This makes sense for an office building or residential high-rise, but not for an industrial building that will produce noise and dust—such a building would be more appropriately located away from a bustling city center.

On this same note, requiring projects to achieve a certain level of

190. *See, e.g.*, LIV HASELBACH, THE ENGINEERING GUIDE TO LEED—NEW CONSTRUCTION 123 (2008) (discussing "Energy and Atmosphere Prerequisite 1: Fundamental Commissioning of the Building Energy Systems").

191. Of note, there is currently a large backlog at the USGBC, with more than 10,000 individual projects registered for certification according to its latest count as of June 4, 2008, and more signing up daily. Andrew Burr, *In an Anticipated Debut, Future of LEED Arrives on 2009 Platform*, USGBC IN THE NEWS (CoStar Group, Bethesda, Md.), June 4, 2008, http://www.usgbc.org/News/USGBCInTheNewsDetails.aspx?ID=3720. As a testament to the increased traffic, the USGBC certified the same number of LEED projects in the 2006–2007 span as it did in its entire six prior years of existence. *Id.*

192. Most municipalities (at this point) do not require actual certification from the USGBC prior to the issuance of a building permit or certificate of occupancy.

certification breeds corruption.[193] If a city requires, for example, Silver or equivalent certification, developers will seek out the cheapest and easiest points possible, even if those points will not actually result in a more environmentally friendly building.[194] The benefit of the voluntary nature of LEED is that developers can decide for themselves how green they want to go.[195] This element of choice is lost when the voluntary, market-based standard is converted into a mandate. This is a problem with the current trend, which fails to result in an efficacious green building regime.

C. *Industry Capture: Self-Regulation and Inherent Bias in a Privately Promulgated Standards System*

Because the USGBC's founders were members of the industry they sought to regulate, they certainly were not going to impose upon themselves standards so strict that they could not comfortably be met (either technologically, or from a financial perspective). Private organizations have an incentive to—and in fact do—set their own standards too low to internalize costs.[196] This results in a set of standards that does not actually regulate to a point where it has an effect on the conduct of the industry.[197] Thus, the standards created by the USGBC are

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193. Randy Udall & Auden Schendler, *LEED Is Broken; Let's Fix It*, GRIST, Oct. 26, 2005, *available at* http://www.igreenbuild.com/cd_1706.aspx. Udall and and Schendler provide an example of a point mongering situation:

> On one project we considered installing a reflective roof. LEED encourages this because black roofs contribute to the "heat island" effect that raises urban air-conditioning bills. Reflective roofs and parking surfaces address this problem, saving energy. But at 8,000 feet in the Rockies, heat islands are not an issue. Still, if we can get the credit, we'd have a better shot at a higher LEED rating, so why not try? Disingenuous? Absolutely. Fair? Not to anyone, and here's why. If we point out that we don't really need the high albedo roof, we'd lose our shot at the credit, shrinking the pool of possible points we can get. If we go for the credit knowing it's irrelevant, we're corrupt. Do you play the game, or not?

Id.

194. This is due to the USGBC's failure to weight LEED points according to their environmental benefits.

195. Of course, there is the risk that, as Udall and Schendler mention, any developer who is seeking LEED certification will want the highest level possible, and thus will be tempted to try to get all possible points whether relevant or not. This is not inherently tied to the fact that the standard is required, as opposed to voluntary.

196. Like the LEED standards, the International Organization for Standardization's (ISO) 14000 environmental management standards directly affect a large "set of stakeholders [who] . . . carry the burden of environmental 'externalities', . . . while [the] industry stands to enhance profits by 'externalizing' environmental impacts." Morrison & Roht-Arriaza, *supra* note 126, at 522.

197. *See* Morrison & Roht-Arriaza, *supra* note 126, at 523 ("There is . . . an inherent tendency for private standards to be, overall, less stringent than public ones covering the same subject

for the most part easy to meet, but not strict enough to solve any real environmental problems.[198] The benefit of easy-to-meet standards is that developers are more willing to comply with them. While this makes sense for a voluntary system (which LEED was designed to be), it is not sufficient for a government mandate that aims to aggressively alleviate local environmental externalities and combat greenhouse gas emissions and other negative contributors to climate change.

The USGBC, although itself a non-profit entity, is "subject to the control of economic actors" (its building industry membership), and thus "will resolve policy issues in a manner that maximizes . . . the profit of those who control it."[199] Indeed, commentators have noted that even in non-profit groups, the decision-making process tends to be controlled primarily by industry insiders and representatives.[200]

While early critics alleged that LEED certification cost too much, more recent data show that basic certification actually adds only a modest percentage to upfront costs, most of which are recovered in operational costs within one to two years.[201] Further, if one considers the tax incentives and rebates offered by some localities, combined with the possibility that the developer might also be the building's long-term operator, even more cost-savings are possible from the construction of a green building.[202] The

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matter.").

198. In some instances—especially if a project is to be constructed on an infill site near public transit—in order to achieve the basic LEED Certified level of certification, a developer will not need to do much beyond what he or she would typically do for a Class A office building. Obviously, if Gold or Platinum level certification is sought or required, a developer will have to incorporate more environmentally-sensitive techniques than he or she might otherwise have done.

199. Shapiro, *supra* note 134, at 404.

200. Shapiro, *supra* note 134, at 407 ("'Because [of] the . . . industry orientation of most technical committees, the costs and complexity of increased safety or purity will almost certainly be weighted more heavily by these committees than by an individual whose primary concern is safety or health. . . .'" (alteration and omissions in original) (quoting Robert W. Hamilton, *The Role of Nongovernmental Standards in the Development of Mandatory Federal Standards Affecting Safety or Health*, 56 TEX. L. REV. 1329, 1378 (1978)). Here, in addition to the health and safety of individuals living in and near the buildings, cities are concerned with the health and safety of the environment.

201. Some critics allege that LEED is an elite standard meant for expensive signature buildings, and that too few buildings adopt the standard because it is too hard and expensive for them to attain. *See, e.g.*, GREG KATS, THE COSTS AND FINANCIAL BENEFITS OF GREEN BUILDINGS: A REPORT TO CALIFORNIA'S SUSTAINABLE BUILDING TASK FORCE 12–18 (2003), http://www.cap-e.com/ewebeditpro/items/O59F3259.pdf. However, others say basic LEED Certification can be obtained for as little as 2 to 3% of the total construction costs. *Id.* (surveying costs in two municipalities with extensive LEED activities and concluding that the average cost premium for obtaining LEED certification averaged less than 2% of the total construction costs). Operational cost recovery is not recognized by many developers and builders who merely construct the building and then sell it. However, those future operational savings can be built into the sale price of the structure.

202. Interestingly, some green building materials are cheaper than their non-green

relative affordability of certification is both a positive and a negative.

On the positive side, and from an economic perspective, developers constructing large projects should willingly include green features that will only add 1 to 2% percent to their total construction costs. Because the price is low, more people would be inclined to add these features to their projects—this is the beauty of a voluntary certification system with standards that are within reach. Similarly, developers are more likely to comply with something that their compatriots constructed than with something imposed upon them by those outside of or opposed to their industry.[203]

On the other hand, especially if a municipality requires green features, it would seem that most large projects could afford to spend a bit more if that additional capital would enable the building to alleviate even more local environmental concerns. For example, under LEED Version 2.2, up to ten points are available for optimizing energy performance.[204] Similarly, up to three points are available for providing on-site renewable energy.[205] While these measures would go a long way toward reducing a building's contribution to global warming, all thirteen points are rarely garnered due to cost and to the fact that other, less-costly points are available in other categories.

The USGBC standard developers recognized that obtaining these points would result in an environmentally beneficial building, and thus included them as possibilities.[206] However, they also wanted to give themselves the option of achieving an equal number of less costly points. This is a benefit of self-regulation.

If non-building-industry-insiders, such as environmental advocates or clean energy proponents, had created the original version of LEED, it is possible that the cost of LEED certification would be more, but it would also be more efficacious, resulting in greater environmental benefit.[207] For

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counterparts. For example, fly ash, a byproduct of coal-fired power plants, can be mixed with concrete to increase its strength and durability. Further, fly ash is less costly than cement, which is typically used in concrete. Toolbase Services, Fly Ash Concrete, http://www.toolbase.org/Technology-Inventory/Foundations/fly-ash-concrete (last visited Jan. 24, 2010).

203. A "decision's acceptability is enhanced if those directly affected participate in its making." Lawrence, *supra* note 136, at 653.

204. LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89, at 2.

205. LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89, at 2.

206. Of course, some in the green building industry are acting, at least in part, out of a moral commitment to efficient buildings and sustainable development principles. *See supra* notes 63 and accompanying text (discussing the membership composition of USGBC).

207. In contrast, take the example of the Forest Stewardship Council (FSC), which was founded by the environmental non-governmental organization the World Wildlife Fund. *See* Errol Meidinger, *The Administrative Law of Global Private-Public Regulation: the Case of Forestry*, 17

example, if a local green building ordinance were to style these important Energy and Atmosphere Credits as prerequisites to obtaining a LEED certifiable determination, developers would internalize the costs and build their projects anyway.[208] Of course, a city does not want to impose standards so stringent as to be impossible to comply with because that would incentivize a developer to build somewhere else entirely.[209] But more than a bare minimum should be required.[210]

EUR. J. INT'L L. 47, 51 (2006). The FSC's program for forest certification imposes standards that go beyond mere consideration of what would be best for a "profit-maximizing corporation[]," and includes requirements based upon considerations of human rights and sustainable development, including requiring "protection of indigenous peoples, workers, communities and the environment." *Id.* at 61–62. One can compare these standards to the original Sustainable Forestry Initiative (SFI) forest certification standards, which had no requirements pertaining to indigenous peoples, workers, or communities. *Id.* at 62. The SFI standards were developed by the American Forest and Paper Association, which was made up of 200 of the largest companies in the forestry industry. *Id.* at 54; *see also* Russell Mokhiber & Robert Weissman, *Timber Ad Cut*, COMMON DREAMS.ORG, Apr. 3, 2001, http://www.commondreams.org/views01/0403-07.htm ("Forest Ethics, a Berkeley, California-based advocacy group that works to protect the ancient rainforests of British Columbia and endangered forests of North America by redirecting U.S. markets toward ecologically sound alternatives . . . say[s] SFI is a sham, and [is] urging wood buyers to give preference to wood certified by the Forest Stewardship Council, an independent organization.").

208. We see this in other mandatory land use regulatory contexts. Although there is initial outcry from developers that they will not be able to afford to comply with the requirements, they find a way to do so. For example, San Francisco has an Inclusionary Affordable Housing Ordinance. *See* S.F. CAL. PLANNING CODE § 315 (2009). Pursuant to this ordinance, a developer of certain new market rate housing must make 15% of the total units affordable to families of low-incomes if those affordable units are constructed on-site, as part of the project. *Id.* § 315.4. If the developer does not want to include on-site affordable units, he can create an off-site affordable-housing project with 20%of the total market rate units, or pay an in-lieu fee. *Id.* § 315.5. This is an extremely costly requirement, but developers in San Francisco have learned to factor it into their pro formas when evaluating a potential project. The same would be true of costly green building requirements.

209. *See supra* Part II.B.3 (discussing race–to–the–bottom theory).

210. A similar problem occurs in the automobile industry. Automobile manufacturers are capable of making cars with higher fuel efficiency standards than they currently do—though it would, of course, cost the automobile manufacturers more money to impose higher standards. *See* James Surowiecki, *Fuel for Thought*, THE NEW YORKER, July 23, 2007, at 25 (describing hesitancy of auto industry to manufacture more fuel-efficient cars, citing "'massive financial and unemployment problems.'"). Such cars are on the road in other countries. *See* Roland Jones, *U.S. "Stuck in Reverse" on Fuel Efficiency*, MSNBC.COM, Feb. 28, 2007, http://www.msnbc.msn.com/id/17344368/ (noting that in 2007, there were only two cars with a fuel efficiency of forty miles per gallon for sale in the United States, compared to 113 such cars for sale in Europe). However, the automobile industry has so captured their regulators that the regulators have been hesitant to impose stricter standards, even though they are possible and could aid in the fight against climate change. *See* John M. Broder, *Obama Directs Regulators to Tighten Auto Rules*, N.Y. TIMES, Jan. 26, 2009, *available at* 2009 WLNR 1539640 ("The auto companies have lobbied hard against [recent regulations requiring 40% improvement in gas mileage by 2020] and have challenged them in court.") In fact, it is only quite recently that President Obama took a step toward reversing this trend, directing federal regulators to act on an application by several states to set their own

In some instances, regulatory capture is not an entirely bad thing. For example, consider building safety and fire standards, which are promulgated by private organizations. With respect to these standards, an overly cautious industry has captured the regulatory drafting body: insurance companies. Because insurance companies do not want to pay out on claims due to fires caused by faulty wiring or the lack of sufficient separation between walls, they want to ensure that buildings are going to be constructed in conformity with highly protective, fire-resistant standards.[211] This is not, however, the case with the building industry. While developers want their buildings to be well-constructed to avoid any claims that might befall them were the building to collapse or otherwise be unsafe, they also are likely more interested in the bottom line on their pro formas than the health of local rivers and streams. Thus, where we have capture by an industry that is not extremely cautious, and direct health and safety issues (as opposed to indirect ones) are not on the line, it is safe to say that capture is a negative.

This capture has led to other less-than-ideal LEED structural elements. For example, just as LEED points are not weighted based on regional differences,[212] they are not weighted according to their environmental importance. A system that provides points that cost less but result in the same environmental benefit as more costly points would be welcomed.[213] However, LEED is not such a system. An extreme example of this is that, under LEED Version 2.2, one point is available for providing bike racks, while one point is available for installing an expensive HVAC system.[214] Similarly, one point is available for using low-emitting paints and coatings on the interior of the building, while one point is available for projects that treat 50% of their wastewater on-site to tertiary standards (and the treated

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emissions limits for automobiles. *Id.* Although President Obama's directive does not mandate that the Environmental Protection Agency must allow the applications, such a result is expected, possibly bringing much-needed change to this area. *Id.*

211. There is an argument that capture is not relevant here, as the insurance industry can regulate privately by setting their premiums, thereby controlling behavior directly.

212. *See supra* Part V.A.1.

213. If the environmental output were the same, a well-crafted system would encourage developers to choose the least costly points available; this would be a positive economic decision for them, and would effectively reduce environmental externalities. A point system has the ability to internalize not just the cost to the builder (like a tax system), but the entire cost–benefit analysis that the builder must conduct.

214. LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89, at 1–2 (noting, specifically, Sustainable Sites Credit 4.2 and Energy and Atmosphere Credit 4). LEED Version 3 aims to address this complaint through a new credit-weighting paradigm, which recognizes that more points should be available for credits that relate to "more important building impacts." USGBC, LEED 2009 CREDIT WEIGHTING 1 (2008), *available at* http://www.usgbc-ncc.org/storage/usgbcncc1/documents/leed_2009_-_weightings_overview.pdf. While this recognition is important, it is presently just a prototype and is expressly not "a wholesale reinvention of weightings." *Id.*

water must then be infiltrated or used on site).[215] Such a distribution is facially inequitable, and such an approach leads to a building that is not holistic.[216] This misallocation of points may be directly attributable to the fact that the USGBC wanted to create a voluntary system that, if fully complied with (e.g., LEED Platinum certification), would result in a truly green building. However, they also wanted to allow developers to do a bare minimum, by choosing the "easy points," while still maintaining the appearance of being green (and being able to market themselves as such).[217]

If, instead of adopting the existing LEED standards as they are, local governments were to analyze which of the points were most important due to local environmental conditions and were to modify the standards themselves, they could combat some of these inherent problems. Specifically, local governments could pass ordinances fitting Scenario 2 or 3, or even Scenario 5 or 6, using the supplementation or adaptation processes provided by LEED to make some of the more costly items required prerequisites.[218] Similarly, they could use the same basic LEED requirements, but adjust the point weightings based on their local environmental concerns. This would especially make sense in certain localities that have specific needs (such as requiring water conservation elements in drought-prone areas or requiring white roofs in large cities).[219]

D. *Prescriptive Versus Performance-Based Standards: Private Interests Means that LEED Does Not Go Far Enough*

LEED is a predominantly prescriptive system, meaning that it sets forth the types of materials and methods to be used, but does not require performance to certain levels, and tends to discourage innovation. In contrast, a performance-based system sets certain goals to be achieved, often leaving the methods of reaching those goals to the entity being

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215. LEED FOR NEW CONSTRUCTION V 2.2, REGISTERED PROJECT CHECKLIST, *supra* note 89, at 1, 3 (noting, specifically, Indoor Environmental Quality Credit 4.2 and Water Efficiency Credit 2).

216. Further, the current point system encourages builders to choose the cheapest combination of points that they can, instead of choosing points that will truly result in an environmentally beneficial building.

217. Roht-Arriaza & Morrison, *supra* note 126, at 523 ("The very flexibility that businesses appreciate reduces the credibility of these standards with local community, NGO, and regulatory audiences. If enterprises can pick and choose which environmental issues to focus on . . . there will be little assurance that major problems are not being swept under the rug. And if the private standards are rigorous enough in design and verification mechanisms to avoid this problem, they will also, by definition, be too rigorous to entice any but a few leading companies into choosing to implement them . . . .").

218. *See supra* Part V.A.2 (discussing adaptation and supplementation).

219. *See* Arthur H. Rosenfeld, Joseph J. Romm, Hashem Akbari, & Alan C. Lloyd, *Painting the Town White—and Green: The Winter Penalty*, MIT TECH. R., Feb. 1997, at 52, *available at* http://www.technologyreview.com/energy/18453/?a=f (noting white, or "cool" roofs, have been proven to decrease "heat island effect," which is most prominent in large cities).

regulated; the key is the end result. Performance-based systems tend to encourage innovation, and in the green building context would also allow greater determination of how "green" these buildings really are.[220] Such information could then be used to modify future versions of the green building ordinances.

Because they require testing to verify whether they have been achieved, goal or performance-based standards are often more difficult and costly to meet and enforce, as well as riskier, than prescriptive standards.[221] At the same time, they are also more likely to result in actual environmental benefits than are prescriptive standards. But due to the cost and risk involved in performance-based standards, industry-derived standards are more likely to be prescriptive.[222]

The prevalence of prescriptive standards and lack of performance-based standards result in a set of green building requirements that encourage people to comply with the status quo. Thus, builders call themselves "green," when in actuality they are doing little beyond what they might have otherwise done anyway. For example, an infill developer whose projects always involve brownfield or greyfield redevelopment within city limits, close to public transportation and other amenities, will easily achieve Sustainable Sites credits. In fact, it is likely that developer would include as project features items required under those credits even if she was not seeking LEED certification.[223]

One benefit of having an ordinance is that those who are subject to it are *required* to comply with it. Unlike a voluntary standard or an incentive-based system, cities that adopt mandatory green building ordinances have decided that people *must* adjust their construction habits to improve the planet. Therefore, cities should be willing to impose tough regulations, not just requirements that give an appearance of being environmentally

220. A performance-based standard could be used to require reduced parking and traffic generation relative to a baseline. For example, a 20% reduction in vehicle trips relative to the baseline could result in one point, while a 60% reduction could result in three points. *See* Todd Litman, Victoria Transp. Policy Inst., RECOMMENDATIONS FOR IMPROVING LEED TRANSPORTATION AND PARKING CREDITS 11 (2008), *available at* http://www.vtpi.org/leed_rec.pdf.

221. It is impossible to determine if a performance-based standard has been met until the project has been completed, and the item can be measured. Thus, there is a risk in that a developer will not know if he has met the requirements of such a standard until everything is in place and completed. This may cause a developer to devalue its building, due to the inability to accurately assess risks.

222. Standards created by those outside the regulatory industry, though, often contain performance-based standards. For example, Forest Stewardship Council (FSC) forest certification, a *non*-forest-industry-based program created by predominantly environmental interests, incorporates a number of performance standards, which "require the achievement of concrete conditions in the forest or in human organizations related to the forest." Meidinger, *supra* note 207, at 65.

223. For example, the developer will build close to public transit and neighborhood amenities and provide on-site open space. Although this developer, with a history of engaging in environmentally preferable practices, should not be penalized or held to a higher standard than a suburban-style developer, if a city finds that most of its development is already infill, it should insist upon a green building ordinance that goes beyond LEED.

forward.[224] Government-created (e.g., Scenario 1), or at least government-vetted and modified (e.g., Scenarios 2 or 5), green building standards could go further in requiring a real change in "business as usual" in the building and construction arena.

VI. LEGITIMATE PROCESS AND THE METHODS BY WHICH LEED STANDARDS ARE PROMULGATED AND ADOPTED INTO MUNICIPAL LAW

The preceding Part focused on the content of green building regulations, and argued that the regime goal of efficacy will not be met through a system that is created on a national level by a private, industry-based organization. This Part addresses the second regime goal—a legitimate process—in an attempt to demonstrate that this goal will not be achieved by public adoption of private LEED standards. When a legitimate process is lacking, as it is here, we must see if the existing process provides adequate "substitutes" for legitimacy—those elements that make a process legitimate in the first place—such as democracy, transparency, notice, and an incentive and opportunity for voice and exit. The USGBC's current promulgation process does not sufficiently address these concerns; thus, legitimate process can only be achieved through a green building ordinance that is promulgated locally and publicly.

A. *Lost In Translation: The USGBC's Process Was Not Designed To Ensure Publicly Legitimate Democracy*

There are two levels of process at issue with respect to municipal adoption of LEED-based green building ordinances. The first is the local government process by which a municipality adopts an ordinance that uses the LEED standards as its content. Because this is a governmental process, it is presumptively legitimate.[225] However, it is the content of the ordinance that is key. In many cities' green building ordinances, the content is determined not through that local process, but through the underlying USGBC LEED standards-creation and adoption process.[226]

Although the USGBC's administrative processes are adequate with respect to the purposes for which they were created (LEED as a voluntary, consensus-based, market-force standard), they do not ensure that the regime goal of legitimate process will be met when translated to mandatory municipal green building ordinances. The processes put in place by the USGBC to create the LEED standards sufficiently allow potentially interested players (e.g., those who think they might want to obtain LEED

224. If a city makes a determination that it wants to address its local environmental externalities, and wants to alleviate larger environmental concerns like climate change, it should be willing to "put its money where its mouth is." A city that makes this determination, but is not willing to invest any time or resources into developing a system that will actually work, is just furthering the "greenwashing" problem that has plagued so many since "green" became a commodity.

225. Meidinger, *supra* note 207, at 81.

226. The details of that process were set forth in Part III.B.

certification) to gain knowledge of, and take part in, the standards-creation process. They participate in electing the individuals who will design the standards, they can voice their opinions about the content of the proposed standards through the comment process, and perhaps most importantly, if they do not agree with the final content of the standards, they have the complete ability to exit by deciding not to seek LEED certification.

A key element of a voluntary system such as LEED is that those who would be subject to it can *decide* whether they want to be subject to it. Transforming voluntary participation into mandatory compliance forces those who would have opted out not to do so and forces those who were not involved with the development of the standards to comply with them. Requiring private developers to comply with voluntary LEED standards is therefore problematic. Whether those developers did or did not participate in the LEED standards creation process, they now lack a major element that made the USGBC's administrative promulgation process legitimate: the ability to exit.[227]

1. Legitimacy of Private Standards-Making Bodies

If we ignore, for a moment, the fact that the standards promulgated by the USGBC's processes are being adopted into governmental codes, we can examine the literature that addresses general rule-making processes for social and environmental standard-setting organizations—in other words, the USGBC's administrative processes as they were intended to be used. While the USGBC aims for a legitimate process, and provides one in the context of creating a voluntary standard, it does not provide enough assurance that these standards can be legitimately imported into local codes and required of private developers.

The International Social and Environmental Accreditation and Labelling Alliance (ISEAL) is a collaboration of leading international standard-setting and conformity-assessment organizations focused on social and environmental issues.[228] In 2006 this group issued a "Code of Good Practice," which, if followed, would purportedly aid in the legitimacy of certification-related standards promulgated by non-governmental, standard-setting organizations.[229]

227. They can, of course, exit by deciding not to build in the locality, but that is an exit of a much greater scale.

228. ISEAL Alliance, About the ISEAL Alliance, http://www.isealalliance.org/index.cfm?fuseaction=Page.viewPage&pageId=471.

229. ISEAL, ISEAL CODE OF GOOD PRACTICE FOR SETTING SOCIAL AND ENVIRONMENTAL STANDARDS 2, (2006), *available at* http://www.fairtrade.net/fileadmin/user_upload/content/P005_ISEAL_Code_PD4_Jan_06.pdf; *see also* Meidinger, *supra* note 207, at 68–69. The American National Standards Institute (ANSI) is another organization that approves standards, as well as the processes used to create them. ANSI, About ANSI Overview, http://www.ansi.org/about_ansi/overview/overview.aspx?menuid=1 (last visited Jan. 24, 2010). Currently none of the USGBC's LEED standards are ANSI approved; however, the USGBC itself is an ANSI standards developing

ISEAL suggests that organizations take certain steps to ensure the promulgation of standards in a legitimate and transparent way, including: (1) following documented procedures, including a complaints resolution mechanism; (2) giving interested parties an opportunity to comment about whether the standards are needed when a new standard is being developed; (3) allowing two rounds of comment submissions by interested parties during public review with a minimum sixty-day comment period; (4) compiling comments and preparing responses to those comments, indicating how the issues have been addressed in the standards; (5) striving for a consensus among a balance of interested parties; (6) promptly publishing approved standards; and (7) maintaining records of standards development activities.[230]

ISEAL recommends providing commenting power to all "interested parties," which it defines as "[a]ny person or group concerned with or directly affected by a standard."[231] This implies that those who are not members of the organization but who might be affected by a standard should be permitted to comment.[232] In the LEED context, this would clearly include developers who might eventually be required, via a local ordinance, to comply with the LEED standards, as well as local residents who are impacted by environmental externalities of buildings. USGBC's notice and comment process may appear to be generally consistent with ISEAL's recommendations. Although notice of revisions to standards is only directly given to USGBC members, both members and nonmembers may comment on proposed standards. Notwithstanding, only members can vote to approve the standards, and there is no true incentive for most individuals who are not in the development industry to participate in the promulgation of LEED standards, not knowing that compliance with those standards may eventually be required of developers in their towns.

ISEAL also suggests that "participation reflects a balance of interests among interested parties in the subject matter and in the geographic scope to which the standard applies" and that "[s]tandard-setting organizations shall include a balance of interests in the structures that are responsible for developing and approving social and environmental standards."[233] While we have information about how membership on USGBC's standards-creation committees is determined, we have no assurance that all sectors of membership will be equally represented on those committees, nor that they will not be dominated by building industry interests. [234]

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organization. Interview with Deon Glaser, *supra* note 82.

230. ISEAL, *supra* note 229, at 4–5; *see also* Meidinger, *supra* note 207, at 68.

231. ISEAL, *supra* note 229, at 3.

232. *See* Meidinger, *supra* note 207, at 70 ("The underlying idea is that a standard will be good, and presumably legitimate, if it reflects the priorities of interested parties.").

233. ISEAL, *supra* note 229, at 6.

234. *See supra* notes 64–66 and accompanying text.

Further, although these committees can, and possibly do, have varied representation from within the USGBC's membership ranks, they are made up of private individuals.[235] Though membership is in theory open to all, not just "anyone" can in fact be an active organization member. First, members must be able to pay a fee to join the organization. Further—and this is especially true of committee members who are very involved with the process of developing new standards—they must be able to afford to donate their time to attend meetings. Moreover, while some committee members are elected by a portion of the USGBC membership, some are appointed, either by existing committee members or by USGBC's upper level executive Board and Steering Committees. Despite these concerns, the USGBC's internal methods appear to be generally consistent with the ISEAL principles, and thus likely impart legitimacy to their voluntary consensus standards-development process. In spite of the process used to create standards, even the USGBC recognizes that if it can get the standards themselves accredited by a third-party accreditation program such as the American National Standards Institute (ANSI), it will go a long way towards making it easier for governments to adopt those standards and feel more comfortable with the level of legitimacy and public participation that goes into the adoption process. However, even if they are legitimate for the purposes for which they were created, the USGBC's administrative process does not conclusively impart sufficient legitimacy to the LEED promulgation process for those standards to be imported into public law.[236]

B. *Ensuring Legitimate Process Through Substitutes for Legitimacy*

1. Legitimacy

At its base, a regulatory system is legitimate if it can "be traced to a properly functioning organ of a state; states themselves [are] presumptively

235. Although it is beyond the scope of this Article, I would also point out that private actors, such as the USGBC committee members, are not state actors, and thus need not obey the same types of norms. *See* Shapiro, *supra* note 134, at 419 ("[P]rivate actors are not constrained in the same manner as government actors to obey such important norms as fairness, nonarbitrariness, and nondiscrimination."); *see also* Martha Minow, *Public and Private Partnerships: Accounting for the New Religion*, 116 HARV. L. REV. 1229, 1246 (2003) (noting that ceding control to private entities "creates possibilities of weakening or avoiding public norms that attach, in the legal sense, to 'state action' or conduct by government").

236. The USGBC system is not inherently democratic, in that each member organization gets a single vote. *See* Bodansky, *supra* note 137, at 715. This means that an organization with 500 members has the same control and weight as an organization with five members. *See id.* ("There is nothing obviously democratic about a system that gives 10,000 inhabitants of a small-island state the same weight as one billion inhabitants of China or India."). Similarly, public participation, while encouraging transparent processes, does not necessarily result in a legitimate process, especially when the participating "public" is in fact merely groups, each of which is given one vote, purporting to represent their members. Finally, while expert opinions are often entitled to deference, their decisions are not intrinsically correct, nor will they necessarily produce the best outcomes.

legitimate."[237] When legitimacy cannot be traced back to public lawmaking procedures, commentators have posited certain alternative bases of legitimacy. These include expertise, transparency, notice, and opportunity for voice and exit. [238] Although it is presumed that a typical municipal ordinance adoption process is legitimate, in the context of adoption of LEED standards, the content of the ordinance at issue have not been promulgated by the governmental body; rather, they have been created by a non-state body.[239] Therefore, because the USGBC's administrative processes cannot be traced to a governmental process, we must consider the substitutes for legitimacy.[240]

2. Local Processes Are More Legitimate Than National Processes—Notice, Incentive, and Voice

In addition to producing a system that is more certain to address local externalities, a locally-created green building regulatory scheme is more likely to allow for citizen participation than a nationally promulgated scheme. At the most basic level, this is because citizens are often provided with greater notice of local actions,[241] and have a greater incentive and opportunity to voice their opinions at city council and planning

237. Meidinger, *supra* note 207, at 81. Of course, if one believes in public choice theory, then this is not necessarily true, because governmental decisions may simply reflect the private, special interests that dominate the local political process. Indeed, my proposal may only guarantee a formally legitimate process. However, a public, governmental process at least provides for the possibility that special interests other than builders will organize to make their voices heard. For example, because the USGBC is dominated by building industry interests, it is unlikely that organized environmentalists have substantial input in the LEED promulgation process. In contrast, a public process gives those environmentalists an opportunity to counter the builders in a public hearing, and perhaps gain the ear of their local elected officials.

238. Bodansky, *supra* note 137, at 715.

239. There is no evidence that the LEED standards have been thoroughly reviewed and vetted just because they have been incorporated by reference into a local government's code through a public lawmaking process. Indeed, city staff typically proposes the text of an ordinance for adoption, and city governmental entity will vote that ordinance up or down. This is especially concerning in a Scenario 3 or 6 jurisdiction.

240. One may query whether legitimacy is even important in this scenario. Typically, legitimacy is important to those who are being regulated; they will be more likely to comply with laws that they believe to have been reached through a legitimate process. *See,e.g.*, Richard Parker, *The Use and Abuse of Trade Leverage to Protect the Global Commons: What We Can Learn From the Tuna-Dolphin Conflict*, 12 GEO. INT'L ENVTL. L. REV. 1, 75 (1999). Here, however, building industry insiders should feel *more* comfortable complying with standards created by their brethren (whether or not those processes were inherently legitimate) than with regulations created and enforced solely by a government entity, albeit a legitimate one.

241. For example, many zoning and planning codes require notice of public hearings that will affect a particular parcel of land to be mailed to that parcel's owner. The same cannot be said of national-level environmental rulemaking activities.

commission hearings or local meetings of private organizations, than they would at a national-level hearing or organizational meeting.[242]

On the public front, the adoption of a municipal law typically follows a predictable, legitimate public process. First, city staff develops and recommends a municipal law for adoption. The city then holds a publicly noticed hearing where citizens are given an opportunity to comment on the merits of the proposal. Before the proposed law can become part of a city's code, the local elected governing body, such as a Board of Supervisors or Commissioners, as well as the Mayor, must vote to approve it (as an ordinance or resolution). Those officials often consider public comments and make proposed changes to staff's suggested law in response to the comments. The creation and approval of a green building ordinance that was proposed in a Scenario 1 jurisdiction, which provides legitimate process, would follow this typical structure.

If a municipality were to use LEED as the base of its local ordinance and then add its own localized modifications (Scenario 2), members of the public who may be impacted by those standards—not only developers, but also community members and environmentalists—would still have an opportunity to comment on the contents of the ordinance, and thus have a voice in the final product.[243] Therefore, this locally-adopted Scenario 2 method also affords legitimate process.[244]

Thus, in Scenario 1 and Scenario 2 jurisdictions, citizens have an opportunity to affect the content of the green building ordinance standards. Such voice imparts legitimacy to the process. Further, if residents disagree with policies or laws that are passed and approved by the city's government, they have an additional opportunity for voice and exit: they

242. It is also typically easier to reach a decision or get ordinances passed at local, rather than national levels, because less consensus is required. *Compare, e.g.*, BOARD OF SUPERVISORS, CITY AND COUNTY OF SAN FRANCISCO, RULES OF ORDER § 2.16 (2007), ("[T]he favorable vote of six of the eleven Supervisors is required to approve ordinances . . . . Ordinances require consideration at two separate meetings with at least five days intervening, a first reading and a final passage."), *available at* http://www.sfbos.org/Modules/ShowDocument.aspx?documentid=34253 *with* ROBERT B. DOVE, ENACTMENT OF A LAW, http://thomas.loc.gov/home/enactment/enactlaw.pdf (last visited Jan. 24, 2010) (briefly, bills in United States Congress originate in one chamber, are referred to committee and subject to amendment and change, then put to vote before the entire chamber and subject to amendment once again, and upon favorable passage are sent to the other chamber where the process repeats itself). *See also* Schoolhouse Rock, *I'm Just a Bill*, http://www.schoolhouserock.tv/Bill.html (last visited Jan. 24, 2010) (describing legislative process from perspective of cartoon "Bill").

243. Indeed, local decision-makers have more of an incentive to listen to their constituents than do national governments or agencies, because those constituencies are smaller and more able to act out against decisions with which they disagree.

244. The same legitimate process would be present in the promulgation and adoption of a Scenario 5 ordinance. However, because it would be enforced by the promulgating entity, it would lose some element of legitimacy.

may vote the officials who passed the ordinance out of office.[245] If they are unsuccessful in doing so, there remains an extreme form of exit, in that they can move to a different jurisdiction with policies more suited to them.[246]

In contrast, if the government is contemplating a Scenario 3 or Scenario 6 type of ordinance and will merely reference the LEED standards in its code without any changes or modifications, members of the local community will not have the opportunity to affect the content of the ordinance itself; the USGBC has already set the terms of LEED at a national level. Citizens will be able to speak at the public hearing on adoption of the ordinance itself, but they will only be able to offer "up or down" input, either asking the locality to approve the ordinance, with LEED as it is, or reject the ordinance outright. Although technically, individuals could have commented on the LEED standards via the USGBC's comment process, this is unrealistic. Average citizens and developers with no interest in green building likely had no notice of the LEED standards adoption process, and moreover had no incentive to voice their opinions about, for example, the promulgation of LEED Version 2.2, because at the time that it was published for comments, their cities had not yet considered adopting it.

Further, in a Scenario 3 or Scenario 6 jurisdiction, even if local residents complain to their elected officials that they disagree with certain elements of the LEED requirements, those city officials are powerless to change the underlying LEED standards.[247] Indeed, the average citizen—especially one who is not a member of the USGBC—cannot avail herself of a democratic process to vote out the USGBC committee members if she disagrees with new LEED requirements.[248] This lack of voice is particularly problematic in this context when there is no real possibility of exit. Therefore, Scenario 3 and Scenario 6 ordinances, which rely on national promulgation of the LEED standard by the USGBC, fail to achieve the regime goal of legitimate process. In contrast, Scenario 1 and Scenario 2 ordinances, which rely on a local process, meet that goal.

To summarize, depending on the ordinance scenario utilized, different

245. Local governments also must provide notice of all public meetings, and many actually mail notices about meetings to property owners whose property will be directly impacted by a matter to be addressed at a given meeting. In contrast, though the USGBC posts notice of its proposed new standards on its website for public comment, an average citizen would have no knowledge of the USGBC comment process, nor reason to look into it.

246. This drastic form of exit would also be present if a city adopted the LEED standards, unless LEED standards are adopted universally.

247. Of course, the city officials can always pass a new ordinance that does not expressly rely on LEED. My point here is that they will not be able to reach into the USGBC's process and alter the terms of the LEED standards themselves.

248. Even LEED members lack a voice in attempting to remove the appointed USGBC committee members.

levels of legitimate process are present. A Scenario 1 jurisdiction, where the local government promulgates and enforces the standards it imposes on private developers, is the most protective of democracy and the rights of local citizens. Such a jurisdiction would not have any of the legitimacy problems addressed in this Part. Similarly, green building ordinances in a Scenario 2 or Scenario 5 jurisdiction allow for more process than do those in a Scenario 3 or Scenario 6 locale. The reason for this is that in Scenarios 2 and 5, the local government actually had to review the details of the LEED standards, determine that they were suitable for the city (perhaps even modifying them slightly, allowing citizens to affect their content), and then adopt them through the normal public lawmaking process, affording opportunity for public comment at a public hearing. Although members of the community might not agree with the content of the green building ordinance, they could not deny the ordinance's legitimacy, because it was "duly *enacted* by a democratically elected legislature."[249] Finally, a Scenario 3 or Scenario 6 jurisdiction, especially one with a 3b or 6b mutable import ordinance, is the least protective of legitimate process and provides for the least amount of notice, incentive, and voice.[250] In these ordinances, no evidence exists that the local governments actually worked through the details of the standards, deciding instead to just refer to them in their codes. This is pure delegation of standard-making authority to the private promulgating entity and imparts no legitimacy to the process.[251]

Encouraging local governments to design their own green building regimes, which take into account their own localities' concerns and desires, will help to achieve the regime goal of legitimate process, resulting in greater public notice, incentive to participate, and voice.

3. Public Processes Are More Legitimate than Private Processes

a. Transparency

While the USGBC has attempted to make the LEED processes for promulgating standards somewhat open, there are no requirements that it do so. On the other hand, public agencies and state actors[252] are subject to

249. Bodansky, *supra* note 137, at 708 (emphasis added).

250. Certainly, Scenarios 1 through 3 are more protective of democracy than are Scenarios 5 and 6, which do not even require public compliance determinations.

251. Indeed, Scenarios 3b and 6b are less legitimate, and afford less participation, than 3a or 6a, because in the mutable reference scenarios, rulemaking authority has been completely delegated to the private entity; they city need not necessarily even be aware when a new version of the LEED standard is approved and operational.

252. It is beyond the scope of this Article to address the issue of whether the USGBC would be considered a state actor. However, an initial review of the literature suggests that, because there is limited to no government involvement in the USGBC's actual development of standards and awarding of certification, it would not be considered a state actor. *See, e.g.*, Jody Freeman, *The Contracting State*, 28 FLA. ST. U. L. REV. 155, 158 (2000) ("[Regulatory contracts] depend heavily

open government and records requirements, such as the Freedom of Information Act (FOIA) and local "sunshine ordinances." These rules require the production, upon request, of documents revealing public decision-making processes.[253] One commentator even refers to FOIA as a "formalization of the tradition of transparency in government." [254] These ordinances do not apply to private, non-state actors, and yet, with respect to LEED and the USGBC, the standards promulgated by those actors have become law.[255]

Scenario 1 ordinances would most effectively address these concerns, and even a Scenario 2 jurisdiction would be acceptable because the public process would inherently include an open discussion and possibility for modification of the content of the privately promulgated standards, thus lending transparency to the process.[256]

b. Notice, Incentive, and Opportunity for Voice

For many of the same reasons that standards promulgated locally, instead of nationally, provide opportunities for notice, incentive, and voice,[257] standards promulgated by public entities, more so than those promulgated by private entities, provide these same benefits. The public records acts, addressed above, provide those who may be affected by publicly developed ordinances with an opportunity to gain knowledge about the processes used to promulgate the regulations, and the requirement that public entities make decisions as part of an open public lawmaking process allows the opportunity for voice. Again, a Scenario 1 jurisdiction would allow for both of these benefits to the greatest extent. Although the processes used to arrive at the text of the LEED standards within the context of the USGBC process do not sufficiently provide average citizens with notice, incentive, or voice, a Scenario 2 jurisdiction that publicly considers the content of those privately-created regulations prior to their adoption addresses some of these participation concerns.

A salient analogy is that of the ISO 14000 series environmental

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on private actors that tend not to be bound by constitutional or administrative law constraints." (citations omitted)).

253. Freedom of Information Act, 5 U.S.C. § 552(a)(1)(A); S.F. CAL., SUNSHINE ORDINANCE, art. III, § 67.21(a) (2008).

254. Brian J. Gorman, *Biosecurity and Secrecy Policy: Problems, Theory, and a Call for Executive Action*, 2 ISJLP 53, 65 (2006).

255. Lawrence, *supra* note 136, at 654.

256. As an aside, performance-based standards tend to foster a more transparent process than prescriptive standards, because the goals that are to be achieved via performance standards are clearly set forth. In contrast, with a prescriptive standard, a developer may be told what material to use, but not why that material is superior to others, thus obscuring the true intent behind the standard. *See* AM. SOC'Y OF MECH. ENGR'S, PERFORMANCE BASED CODES AND STANDARDS 1 (2004), *available at* http://cstools.asme.org/csconnect/pdf/CommitteeFiles/13525.pdf.

257. *See supra* Part VI.B.2.

management standards, which were developed by a group, like the USGBC, that "remains heavily influenced by the private sector."[258] Although that group's scope of work has substantially expanded to encompass activities that may have significant societal impacts, there has not been a corresponding increase in the representation of public stakeholders. This fact has been the source of consternation to some government agencies and civil society groups who have expressed a preference for the development of public standards whenever practical and feasible.[259]

C. *A Final Process Concern: The Problem of LEED as a Changing Standard*

The USGBC's LEED standards are not static. Green building technology, as with all construction and architectural technology, is constantly evolving. As new methods of recycling, materials reuse, and energy conservation are developed, the design of green buildings will also change. In recognition of this, the USGBC did not create LEED to be a static system. LEED for New Construction began with Version 1.0, moved through Versions 2.0, 2.1, and 2.2, and now the next version of LEED, 3.0, is online.[260] While the USGBC's recognition of emerging technologies is important, many cities that have adopted LEED into their Codes have overlooked, or not yet addressed, this point.

Municipalities appear to be taking two tracks when it comes to deciding which version of the LEED standards their green building ordinances will incorporate. Some are locking into place the version in effect when their green building statute was promulgated (the fixed reference, Scenarios 3a and 6a), [261] while others state that the version of LEED in effect at the time of permit application controls (the mutable reference, Scenarios 3b and 6b).[262] For example, the San Francisco green building ordinance (a

258. Morrison & Roht-Arriaza, *supra* note 126, at 522.

259. Morrison & Roht-Arriaza, *supra* note 126, at 522.

260. *See supra* notes 88, 98.

261. *See, e.g.*, S.F., CAL., BUILDING CODE ch. 13C, § 1304C.0 (2007) ("The following green building requirements shall apply to all projects within the scope of this chapter. . . . The applicable LEED® . . . performance standards for any applications subject to this legislation, regardless of application dates, are: . . . LEED®–NC v2.2–LEED® for New Construction (July 2007)."); MAYOR'S TASK FORCE REPORT, SAN FRANCISCO, *supra* note 6, at Executive Summary 2 ("Regardless of changes to the rating systems that occur after adoption of these recommendations, the rating systems in effect at the time of adoption of these recommendations should govern.").

262. LIVERMORE, CAL., MUN. CODE § 15.76.030 (2007), *available at* http://www.codepublishing.com/ca/LivermorePDF/Livermorefullcode1109.pdf ("'LEED™ rating system' means *the most recent version* of the Leadership in Energy and Environmental Design (LEED™) Commercial Green Building System™, or other related LEED™ rating system, approved by the U.S. Green Building Council") (emphasis added); BABYLON, N.Y., CODE § 89-84 (2008), *available at* http://www.ecode360.com/?custId=BA0924 ("The Town of Babylon "hereby adopts, in principle, the [USGBC's] . . . Leadership in Energy and Environmental Design for New

Scenario 3a ordinance) freezes LEED for New Construction Version 2.2 in its code.[263] In one respect, the approach taken by San Francisco lessens concerns of improper delegation, as it implies that (similar to a Scenario 2 ordinance) the City reviewed the requirements of LEED Version 2.2, decided that they were satisfactory, and determined that they could be relied upon to ensure that projects built pursuant to those standards would help lessen impacts from climate change and improve local environmental concerns.

However, there are also problems with this approach. For example, assume a developer applies for a building permit in a town that requires privately funded commercial buildings to obtain LEED Silver certification under Version 2.2, and does so while Version 2.2 is still in effect. Further assume that the developer then vested her right to construct the building, but for certain reasons has not been able to continue or complete full construction, and thus has not yet received a certificate of occupancy. In the meantime, assume that the USGBC moves to its newly revised standards, LEED Version 3.0. Depending on how long it takes the vested building to be constructed and how long the USGBC agrees to continue issuing certifications under the old Version 2.2, it is possible that the developer may no longer be able to obtain LEED Silver certification under Version 2.2, because the USGBC will have moved on to only offering certification for compliance with LEED Version 3.0.[264]

Perhaps a more pressing concern is that the USGBC modifies its standards for a reason—typically to correct perceived problems with the existing system. LEED Version 3.0, for example, addresses some of the concerns raised in this article, including point weightings based on human health and environmental impacts, and introduces a regional component. By freezing in time an evolving standard, a city will miss out on positive new developments such as these.[265] Further, as technology in this area improves, it is likely that easier and more cost-efficient methods for dealing with energy consumption and green building construction will be developed. The frozen-in-time LEED-based ordinances adopted by cities will either have to be revised in the near future, or cities will be stuck with

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Construction (LEED-NC) Rating System, Version 2.2, and, further, automatically adopts any future versions promulgated by the USGBC.").

263. S.F., CAL., BUILDING CODE ch. 13C, § 1304C.0 (2007) (effective Nov. 1, 2008).

264. As of June 27, 2009, all new projects registering for LEED Certification with the USGBC must do so pursuant to LEED v. 3.0, not v. 2.2. USGBC, LEED V3 Rollout, https://www.usgbc.org/ShowFile.aspx?DocumentID=5176 (last visited Jan. 24, 2010).

265. Of course, a city that has adopted, for example, LEED v. 2.2 can always amend its ordinance to adopt LEED v. 3.0. However, this invites a host of problems, including projects rushing to get into the pipeline so that they can be included under the old standard (if it would be more advantageous), additional long and drawn out public hearing processes over adoption of the new version, and additional investment of staff time and resources to learn about a new system after having already become familiar with the prior version.

an outdated methodology.[266]

Other municipalities have opted to reference the current version of LEED in their codes, as well as future versions.[267] This Scenario 3b and 6b approach is also problematic, especially from a legal perspective. Certain courts have found the adoption of future editions of codes to be an invalid delegation.[268] In *State v. Crawford*, the Kansas Supreme Court held that a statute requiring that "'all electric wiring . . . be in accordance with the National Electrical Code' was void for uncertainty."[269] Specifically, the court had concerns that a person trying to comply with that code would not know if the National Fire Protective Association, the private entity that promulgated the code, had reconvened and revised the code.[270] Such concerns, which were legitimate in 1919 when *Crawford* was decided,[271] are somewhat obviated in this day and age, especially with respect to the USGBC's revisions to the LEED standards, which are easily available online.[272] However, the court's underlying delegation determination

266. If the ordinances are added to the building code, instead of the planning or zoning code, they will be more difficult to revise. In many states, revising local building codes is notoriously difficult, and often requires approval from the state.

267. *See, e.g.*, BABYLON, N.Y., CODE § 89-84 (2008) *available at* http://www.ecode360.com/?custId=BA0924; PASADENA, CAL., MUN. CODE, § 14.90.030(I) (Green Building Practices, Definitions) (2008) ("'LEED's Green Building Rating System (Rating System)' means the Leadership in Energy and Environmental Design Green Building Rating System approved by the United States Green Building Council (USGBC) *and as that Rating System may be amended from time to time by the USGBC*." (emphasis added)), *available at* http://library.municode.com/index.aspx?clientID=16551&stateID=5&stateName=California.

268. State v. Crawford, 177 P. 360, 361 (Kan. 1919) (finding adoption of future editions of codes an unlawful delegation of legislative authority); N. Lights Motel, Inc. v. Sweaney, 561 P.2d 1176, 1181 n.3 (Alaska 1977) (stating, without reaching the constitutional question of delegation, "[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*" (emphasis added)).

269. 177 P. at 361 (quoting the Fire Prevention Act).

270. *Id.* ("[T]here is no official way, indeed no practical way, for the average property owner to know what these code rules are.").

271. *See id.* at 360.

272. *See* USGBC, LEED, http://www.usgbc.org/DisplayPage.aspx?CMSPageID=51 (last visited Nov. 15, 2009) (providing an introduction to LEED, the next version of LEED, and other LEED information). More recently, a court found that adoption of future versions of the code via statute is not a violation. Indep. Electricians & Elec. Contractors' Ass'n v. N.J. Bd. of Exam'rs of Elec. Contractors, 256 A.2d 33, 42 (N.J. 1969). In *Independent Electricians*, the New Jersey Supreme Court considered a state statute that required performance of electrical construction in accordance with the standards of the National Electrical Code. *Id.* at 241–42. The court found that there was no unconstitutional delegation of legislative power where 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." *Id.* at 242. Thus, a town such as Babylon, New York that has adopted future versions of LEED into its municipal code could rely on similar arguments, noting that LEED has become the de

remains valid and applicable:

> If the Legislature desires to adopt a rule of the National Electrical Code as a law of this state, it should copy that rule, and give it a title and an enacting clause, and pass it through the Senate and the House of Representatives by a constitutional majority, and give the Governor a chance to approve or veto it, and then hand it over to the secretary of state for publication.[273]

The court is, in effect, suggesting a Scenario 2 regime.

VII. CONCLUSION: SO WHAT'S THE ALTERNATIVE?

Private green building requirements that rely on LEED standards would seem to be, if nothing else, a positive first step toward alleviating local environmental problems as well as addressing broader climate change issues. The fact that cities are taking action at all shows that they take the environment seriously, and believe that it is the responsibility of all parties involved to improve it. However, the problem is that once a city has adopted a LEED-based private green building ordinance, it will believe it has sufficiently addressed its concerns, and move onto something else. Instead, cities must be ready, willing, and able to modify those ordinances as the market and technological advances lower the cost and availability of green building mechanisms, and as technical standards emerge that better match the environmental needs of particular localities.[274] The adoption of green building mandates is a nascent trend, though a snowballing one. Thus, there is still time to halt the spread of LEED-based ordinances, which promote inefficient results achieved through less-than-legitimate processes, and adopt a better type of ordinance.

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facto national standard for green building in local municipal codes, and its revisions are conducted through an open and collaborative process.

273. *Crawford*, 177 P. at 361. Such an approach would be in line with Scenario 2 ordinances. *Cf.* City of Syracuse v. Penny, 300 N.Y.S.2d 679, 683, (N.Y. Sup. Ct. 1969) (holding there is no invalid delegation where city adopted the National Electrical Code and incorporated it into the city's ordinance as part of the Electric Code of the City of Syracuse).

274. Local governments should consider the cautionary tale surrounding the Occupational Safety and Health Administration's (OSHA) adoption of industry standards. OSHA adopted a number of regulations that were created as national consensus standards by the American Conference of Governmental and Industrial Hygienists, a private industry organization. Shapiro, *supra* note 134, at 401. Those regulations stuck, and they are now too entrenched to be changed, though people now realize that the standards are weak. Specifically, workers are not substantially protected by the standards due to the fact that the industry that drafted them was reluctant to characterize certain substances as carcinogens (indeed, more reluctant than the governmental organization itself would have been). THOMAS O. MCGARITY & SIDNEY A. SHAPIRO, WORKERS AT RISK: THE FAILED PROMISE OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 283 (1993).

This Article has argued that a local (not national) and public (not private) solution is needed to ensure the greatest benefits to the environment at the least cost to cities and developers. It has also addressed the infeasibility of expecting cities—especially small ones with little technical expertise or manpower—to develop their own green building ordinances from scratch. Because of this resource problem, it may not be possible to articulate a "best possible solution." It therefore makes sense for all localities who wish to create a green building ordinance to start with a basic structure, such as the LEED checklist or a similar system that has been created by another, perhaps more local, standard-making organization.[275] Then, by taking into account local conditions, such as Washington, D.C.'s poor river and air quality or Nevada's drought-like conditions and abundant sunlight, local governments, working with members of local universities,[276] state energy departments, or even LEED Accredited Professionals, should determine which standards would most effectively alleviate their locality-specific problems. Local governments should also involve economists and modelers to determine whether the existing standards could be augmented to better to achieve their goals while still ensuring that projects could be feasibly constructed. Members of the environmental community should be involved too, along with those in the building industry, to ensure balance between concerns for externalities and internalities.[277] Once this basic structure is in operation, localities should continue to review new versions of existing standards as they are promulgated by private organizations to determine whether any of the changes could aid them in their local pursuit of a healthy environment and in combating climate change.

A substantial problem with the LEED system is that the points are not weighted, and thus developers often go with the cheaper and easier points to achieve LEED certification, neglecting the more expensive yet environmentally beneficial options, such as those relating to energy

275. Although this Article focuses on the USGBC's LEED standards, because those are the most widely used, there are a number of other green building standards systems that have been promulgated, including Green Globes (owned and operated by the Green Building Initiative, another industry-based organization), Build it Green's GreenPoint Rated system, SBTool 07 (the software implementation of the Green Building Challenge assessment method), and the American Institute of Architects' sustainability position statement and 16-point criteria for ratings systems.

276. For example, the University of Georgia School of Law has a land use clinic that helps local governments develop new land use ordinances. *See* University of Georgia, Land Use Clinic, http://law.uga.edu/landuseclinic/index.html (last visited Jan. 28, 2010).

277. Most of the larger cities that have implemented the LEED-based private green building ordinances first formed green building "task forces," comprising government, industry, and environmental interests. These task forces likely understood and discussed the problems and limitations of a LEED-based system, but wanted to take action quickly and begin moving forward with an ordinance. This does not mean that, were they to reexamine the issue, with the understanding that they wanted to go *beyond* LEED, that they could not do so in a mutually agreeable way. Telephone Interview with D.C. Neighborhood Planning Coordinator, *supra* note 45.

conservation. If localities decide to create their own green building ordinances, they should work with economists to conduct cost–benefit analyses and to prioritize concerns. For example, if a locality has only infill spaces that are close to public transit available for construction, but the locality is drought-prone and water-conservation measures are a priority, it could either: (a) make water conservation measures a prerequisite to obtaining certification; or (b) weight the points available for water conservation more heavily than those for less pressing concerns, such as sustainable sites located close to public transportation. By making the available points align more closely with local environmental costs, developers will be able to conduct a true cost–benefit analysis.

Finally, green building ordinances must also take into account that the greenest building is an existing building, something the current version of LEED fails to recognize. The energy and resources that go into demolition and new construction—even new green construction—far surpasses that involved in renovating existing or historic buildings.

In sum, this Article shows the failings of a private green building ordinance that relies wholly on the USGBC's LEED standards. A green building regime should be designed to achieve two fundamental goals: (1) efficacy—considering costs but ensuring strong green building measures so as to combat global warming and reduce local environmental externalities caused by buildings; and (2) legitimate process—ensuring that the regulations implemented by local governments are subject to a process that is legitimate, through various degrees of transparency, notice, and opportunity for voice and exit. Finally, although private green building ordinances can result in real environmental benefits, the two stated regime goals will not be met if cities continue to rely only on unmodified LEED standards as the basis of their green building regulations.

So which of the two buildings described at the beginning of this Article is greener? If we define green by a building's local externalities, certainly the older, existing building, which is located close to parks, downtown amenities, and transit, is greener. People who live and work in the building can make use of the public transit options, reducing their reliance on individual vehicles that consume fuel and release harmful emissions. Although its energy use and water consumption are not efficient, it is safe to say that over the building's lifetime those losses pale in comparison to the water and energy that would be required to demolish it and construct a new building—even a LEED-certified one. However, if a city relies on LEED standards, the new "energy-efficient" building, which consumed numerous natural resources and large amounts of energy in its construction and infrastructure needs, not to mention rezoned farmland to commercial use, can be deemed a "green building."[278]

278. While LEED points are available in the Sustainable Sites category for dense, infill development, such development is not a prerequisite. The argument could be made that, if a

The choice between the two types of buildings is an important one that cities must address. So that their green building ordinances will in fact result in desired changes in the environment, cities must consider seriously what types of harms they are trying to alleviate and what type of development they want to promote. This may vary based on locality, but the answer is the key to shaping the look and feel of our future.

building were not able to achieve many points under the Sustainable Sites category due to its non-infill location, it would have to do more in the other categories to reach the requisite number of points for certification. Notably, however, even non-infill, greenfield development can receive up to eleven out of a possible fourteen points in the Sustainable Sites category.