

Smart City: Green Buildings

A Town + Gown Research Project in conjunction with the Sallan
Foundation

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I. Introduction

The necessity of “Green buildings” has become more evident over the last several decades. Green building refers to “the practice of 1) increasing the efficiency with which buildings and their sites use energy, water, and materials and 2) reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance, and removal.”¹ In New York City, buildings have a major impact upon the environment. Energy used in buildings accounts for almost 80% of the City’s greenhouse gas emissions.² As a result, New York City, along with many local and state governments, has enacted green building policies.

Over the last ten years, the City has introduced numerous initiatives with the potential to significantly reduce the city’s physical infrastructure’s environmental impact on the local, regional, and global scale. Many of these initiatives have social and economic dimensions. As stated in the PlaNYC Green Building report, “Green building, a discipline that has emerged over the last several decades, aims to improve the impact of buildings on the environment and our health. An integrated design process that considers the interaction between form, climate, site, and building systems, green building practices has multiple benefits.”³ Collectively, these efforts

¹ Bldg. Design & Constr., *White Paper on Sustainability: A Report on the Green Building Movement*, Bldg. Design & Constr. 4 (2003)(supplement), available at <https://www.usgbc.org/Docs/Resources/BDCWhitePaperR2.pdf> (quoting Office of Federal Environmental Executive)

² See <http://www.nyc.gov/html/planyc2030/html/theplan/green-buildings.shtml>

³ *PlaNYC 2011 report on Green Buildings*, available at http://nytelecom.vo.llnwd.net/o15/agencies/planyc2030/pdf/planyc_2011_green_building.pdf

are typically referred to as “sustainable” initiatives.⁴ These efforts demonstrate how sustainability has been a key operative force in parts of the City’s laws.

A. Intro to PlaNYC

The PlaNYC policy, which was introduced in April 2007, represented the City’s commitment to a holistic approach to sustainability. PlaNYC is truly comprehensive and includes several initiatives and various techniques with the goal of reducing the City’s greenhouse gas emissions by more than 30% by 2030.⁵ Under the auspices of the joint task force of professionals from the design and construction industry, recommendations were made to change the city’s existing Building Code that would help achieve the environmental goals of PlaNYC.⁶ 111 recommended changes were made to the existing Building Code and the Mayor’s Office of Economic Development (OED) researched methodologies, which could be used to estimate the potential impact of these proposed changes.⁷ The OED adopted a methodology of applying the proposed laws to several “prototypical” building types, which mirrored the actual types of buildings and construction projects in the City.⁸ The OED also applied a cost analysis in order to determine the various building activities that may be impacted. Additional costs of complying with each proposed change to the Building Code was considered with each prototype.⁹ While this was commendable, this approach was limited, as it did not account for the “soft costs” that potentially suggests the limitations of the NYC Building Code as Vehicle of Change.

⁴ These initiatives have chiefly taken three forms: pilot projects, policy statements/plans and related legislative changes.

⁵ Patrick Hagerty, *How can the City utilize Existing Legal Tools to Approximate the Benefits of Third-Party Financing from Public Private Partnerships for Environmentally Sustainable Projects?*

⁶ Ian Henri, *Utilizing the Pro Forma Investment Model in a Sensitivity Analysis to Move Towards a Full Cost Accounting of Proposed Built Environment Regulation.*

⁷ NYC Green Codes Task Force: Executive Summary, p. 79 (2010).

⁸ *Id*; the DOB had employed the use of such building “typicals” in its own 2006 Building Code revision process that led to the 2008 Building Code.

⁹ NYC Green Codes Task Force “Baseline Building Types”

B. Limitations of the NYC Building Code as the Vehicle of Change

The building code, with its original purpose, structure and tools, may not be the ideal means of changing behavior and encouraging the reduction of carbon emissions. When adopting a cost-benefit analysis, the OED excluded the calculation of “soft costs,” which includes any related architectural, engineering, financing or legal fees that could potentially arise from the proposed Building Code changes.¹⁰ Green building design is continuously shaped by ongoing technological developments and innovations. Yet, the relevant provisions of the building code are unlikely to be updated simultaneously. Thus, the law has to address the impact of any added delay that the changes could have on construction.¹¹ The unfamiliarity with the code updates and new requirements, and the new technology and design, could make implementing new building code regulations result in a significant construction delay. This possibility could hinder number contractors from bidding on a construction project. Familiarity with or prior experience in a proposed project is significant to the decision-making process during a bidding process.¹² Furthermore, “delays in the pre-construction process add a significant amount of cost and expense to a project, and increases in time increase the overall risk to a project through political changes, unforeseeable variation in prices and interest rates.”¹³ Thus, we face a question of how law can be drafted so that it could incorporate changing green building related technology and foster the growth of green buildings.

II. Problem Statement

What legal mechanisms and perspectives would encourage the growth of green buildings? What kind of laws will enable NYC to achieve the green building policy objectives?

¹⁰ See Henri, p. 7

¹¹ *Id.*

¹² *Id.* See also Danny Myers, *Construction Economics: A New Approach*, Spon Press (2004) at p. 104.

¹³ *DDC: Modeling the Effects of CEQR*, Milano The New School for Management and Urban Policy, p.34 (May 2010).

Sufficient time has passed since NYC has adopted PlaNYC and enacted a suite of laws. While the building code was used as the site for laws to reduce carbon emissions of new and existing buildings, we must explore other legal mechanisms and perspectives that would encourage greater reduction of carbon emissions from buildings. As this paper will later discuss, there is a varied and extensive menu of legal and policy measures that encourage green buildings.

Developing policy options for NYC to encourage green building development poses many challenges. Expansion of green buildings in NYC is a complex and interconnected goal. This project will focus on the how, when, where to make the various facets of the green building laws achieve the policy objectives. Our project will analyze why certain policy options may be inadequate by themselves and what alternative methodologies are available. There may not be a single approach that solves the problem. We will explore conventional methods that include taxes, impact fees, subsidies and information provisions. Unconventional methods that take into account behavioral tendencies will also be analyzed.

PlaNYC recognizes this fact the diversity of approaches reflect a complex problem that requires an array of solutions. If developed in tandem, they might provide cross support. Thus, we propose an adoption of both conventional and unconventional methods. A legal analysis is necessary, as any green building legislation would need to be considered within the existing regulatory scheme. Furthermore, unproven standards in the area of sustainability could be challenged as arbitrary or over-aggressive. We will examine a number of legal issues that arise in connection with different initiatives.

The New York City Department of Design and Construction and the Sallan Foundation have asked us to develop policy options based on experience with the current suite of green

building laws for NYC. The research is under the auspices of the City's Town+Gown program and will be cited in websites of both T+G and Sallen. With access to up-to-date information on current policies and material for analysis, this project will analyze various policy options, strategies and methodologies.

III. Policy Menu

Encouraging green buildings in New York City (the City) is a complex legal and policy issue. Costs associated with "going green" are high and can discourage new builders and current owners from adopting green standards. Without government intervention, construction in the City would be left to market forces. Depending on market demand and prices, these market forces can help encourage or discourage green building. Suggestions for greener City buildings must consider that all regulations that distort market behavior will have intended and unintended consequences. It is also important to recognize there is a limit to the degree of any additional burden on owners and builders that new regulations will impose.

Peter Salin's comment in a recent City Journal article annunciates this need: "The City's plans for its physical environment suffer from the same philosophical flaw that pervades all its policies: the assumption that Gotham is so desirable that no price is too high, no burden too great, for the privilege of locating there (or, in this case, building there).¹⁴ Accordingly, there is a varied and extensive menu of legal and policy measures that encourage green buildings. Establishing more green building will fall short of this goal if regulation is only on focused on new construction though because 85% of the City's building stock in 2030 will be from buildings that currently exist.¹⁵

¹⁴ Peter D. Salins, Liberating Development, City Journal, July 10, 2009, available at http://www.city-journal.org/2009/nytom_zoning.html

¹⁵ <http://www.nyc.gov/html/dcp/html/greenbuildings/index.shtml>

There are numerous approaches to addressing this problem. One approach we will look to explore are conventional methods, these consist of taxes, impact fees, subsidies and information provisions (also called disclosure provisions). Unconventional methods are also available and consist of structuring laws based on behavioral tendencies. An additional concern to be mindful of within our analysis is that regulations are not created within a vacuum and there are numerous existing local, state, and federal laws that look to address green building.

A. Conventional Methods

There is a varied and extensive menu of legal “carrots and sticks” to enforce and encourage green building.¹⁶ These include taxes, impact fees, subsidies, information provisions, and fast-tracking building permits. Information provisions and subsidies are the proverbial carrots that local authorities can use to encourage green buildings. On the other side of the policy menu lie taxes and impact fees. These are the policy “sticks,” which forces compliance with green building codes. These sticks are to be utilized to the extent that market failures have occurred.¹⁷ That is, imposing a monetary penalty should only be used if the market alone does not adopt the desired behavior.

i. Policy Carrots

Information provisions would require building owners and contractors to tell consumers, buyers and tenants the extent that the building and apartment is “green.”¹⁸ Information provisions should be the first step in remedying the City’s green building issue.¹⁹ In 2009, the

¹⁶ Regulations are a necessary solution over common law when addressing environmental issues where minimal injuries occur to a large number of people. Cass R. Sunstein & Fourth Panelist, Panel II: Public Versus Private Environmental Regulation, 21 Ecology L.Q. 455 (1994).

¹⁷ A market failure occurs when the market economy delivers an outcome that does not maximize efficiency. Jonathan Gruber, Public Finance and Public Policy, 117. Worth Publishers 2005.

¹⁸ Informational provisions are often also referred to as “Disclosure Provisions.”

¹⁹ “The preferred remedy for environmental problems should be disclosure of information.” Cass R. Sunstein & Fourth Panelist, Panel II: Public Versus Private Environmental Regulation, 21 Ecology L.Q. 457-58 (1994).

City adopted benchmarking on a limited basis.²⁰ Benchmarking is the process of gathering information and comparing buildings' environmental performance relative to other similarly situated buildings in order to encourage best environmental practices.²¹ These benchmarks are derived from the Environmental Protection Agency's (EPA) web interface to track energy and water usage.²² While the information is available online residents awareness and reliance on this information is still developing.²³

Informational provisions have garnered wide support and criticism. A common problem with information provisions is price. Where tenants and buyers cannot afford to live in "green buildings" then they might opt for a lesser expensive non-green alternative. Similarly, potential residents might simply not care whether a residence is green. Given the City's, and specifically Manhattan's, housing scarcity whether a building is green might have little impact on potential residents.

Conversely, subsidies would provide an economic incentive to builders, contractors, and owners to construct or maintain green buildings. Popular forms of subsidies are tax related, specifically, property tax abatements. Builders and owners could more easily be incentivized when they understand subsidies as value creating, which adds to the bottom line. Unlike information provisions, which might add a less tangible (or unpredictable) value, subsidies can be easily and readily put into dollars figures that make a cost-benefit analysis easily identifiable.

Still, subsidies are unstable, unreliable and politically vulnerable. Builders and owners must understand that these incentives represent money absorbed by governments, which forgo

²⁰ Law requires benchmarking for all buildings over 50,000 sq. feet (Local Law 84/2009).

²¹ See. <http://lawschool.westlaw.com/Gradebook/AssignmentSubmit.aspx?courseid=149681&assignmentid=125628>

²² The benchmarking measure is the Energy Use Intensity (EUI) scale. *See*. <https://www.energystar.gov/index.cfm?fuseaction=buildingcontest.eui>.

²³ Describing while the information was gathered for her co-op it was not used by her co-op board in decision process. Nancy Anderson, http://www.sallan.org/Torchlight/2012/10/taking_stock_of_benchmarking_1.php.

tax revenue. For instance, a \$1M of tax credit for a Leadership in Energy and Environmental Design (LEED) building, means the state or city does not collect that amount. This essentially means that the government is investing that money in the buildings.²⁴ To the extent that government deficits lead to budget cuts, subsidies may be an easy victim. As a result, government must make a serious and long-term commitment to subsidies in order for them to be effective.²⁵

Similarly, subsidies can be criticized because they are not extensive enough or because they encourage free riders. That is, those who take advantage of subsidies would have performed the desired conduct anyway.

Finally, fast-tracking permits is another policy carrot that could also incentivize green building. These incentives push permits to the front of the line for permit seekers that have complied with the building authority's green guidelines. For instance, the city of San Francisco has fast-tracked LEED Gold-rated construction projects are designated a Type 1 application, and received a fast-tracked processing time of two weeks.²⁶ In an effort to dissuade those who might procure the permits and fail to comply with green standards, San Francisco's ordinance includes requirements for green building performance assurance.²⁷

ii. Policy Sticks

Unlike policy carrots that seek to incentivize a desired behavior, policy sticks are designed to punish and force compliance with green building codes through measures such as

²⁴ Understanding Green Due Diligence; What is it and how does it differ from regular investigation? New York Law Journal (Online) June 18, 2012.

²⁵ See Is it the End of Subsidies for Green Buildings?; New York Law Journal (Online) May 21, 2012. (New York was one of the first states to enact a state income tax credit for green buildings at the end of 1999. However, the legislation allowed only an initial allocation of \$25 million, with another \$25 million proposed. These cap totals were paltry for the Empire State.)

²⁶ San Francisco (California), City of, Planning Department. 2009. "Planning Department Priority Application Processing Guidelines." Planning Director Bulletin No. 02.

²⁷ Id.

impact fees and taxes. Taxes and fees are seen as beneficial because, unlike subsidies, they do not burden government coffers.²⁸

These policy sticks respond to negative externalities. Specifically, the environmental impact of non-green buildings created negative externalities. A negative externality exists whenever the actions of one party make another party worse off but the first party does not bear the cost for receiving the benefit.²⁹ An example of a negative externality is the rebound effects incurred after the increased sales in SUVs. From 1988 to 2003 the number of SUV's sold increased nearly fourfold.³⁰ While car companies generated substantial profits from these increased sales they did not incur the negative externalities caused by this change in automobile composition, such as decreased fuel efficiency, increased road repairs, and greater danger to smaller vehicles already on the road.³¹

Environmental impact is sometimes referred to as the ultimate externality as many human actions cause adverse effects to the environment without incurring a direct cost.³² The lack of green buildings in the City creates numerous externalities such as inefficient depletion of fossil fuels, which generates higher energy costs for all consumers.³³ Inefficient buildings also strain key infrastructure through increased use of water, sewage, and transportation. This increased use will require more maintenance and faster replacement time.

²⁸ The process of addressing negative externalities by applying the cost on the party that benefits is known as "internalizing the externality." Gruber, Public Finance and Public Policy at 124.

²⁹ Id. at 117.

³⁰ Increasing from 6.4% in 1988 to 23.4% in 2003. Id. at 124.

³¹ The average fuel economy for an SUV was 18mpg compared to a midsize vehicle with 25mpg. SUV's averaged 4,500lbs while midsize vehicles averaged 3,200 lbs., this increased weight increased road repair costs to \$30.5 billion. Id.

³² Id.

³³ Full energy savings by compliance with state energy laws could save upwards of \$174 million annually. Shelly Stellberg. <http://www.imt.org/resources/detail/assessment-of-energy-efficiency-achievable-from-improved-compliance-with-u>.

While building in the City is one of the most expensive locations in the world the environmental impact of building here is often not borne by builders and operators. Still, these policy sticks are most often criticized because they raise the cost of construction and reduce the cost of affordable housing.³⁴

a. Taxes and Impact Fees

Taxes and impact fees are ways of forcing the market to act in a desired way. These policy sticks can create certain desired behaviors because market actors must pay if they do not comply with the desired behavior. When the government levies a tax or impact fee, it penalizes certain behaviors. Those taxes and impact fees are then incorporated into the price of goods being sold.³⁵ When the price of goods become higher than their demand, market actors produce less or correct their behavior to avoid paying the tax or impact fee.

Here, the government could levy a tax on builders and owners of buildings that do not comply with the City's green standards. This raises the cost of building and owning property, to the extent that owners will comply with the green standards rather than pay taxes. As such, these taxes "correct" the behavior of market actors causing them to comply with green building standards.

B. Unconventional Methods

The City should incorporate behavioral research conducted by scholars and social scientists exposing predilection based on phrasing and context of choice.³⁶ All regulations are not created equal, the structure and framing are often determinative of a regulation's

³⁴ David Engel, Edwin Stromberg & Margery Austin Turner. Toward a National Urban Environmental Policy, 2 *Cityscape: A Journal of Policy Development and Research* 1, 11 (Sept. 1996).

³⁵ Gruber, Public Finance and Public Policy, at 128.

³⁶ Cass R. Sunstein, How Law Constructs Preferences, 86 *Geo. L.J.* 2637 (1998).

effectiveness.³⁷ All existing regulations or new proposals should be phrased in the way to receive the most effective response. Current laws rely heavily on rationale choice models.³⁸ While rationale basis can be useful on a normative basis, descriptively their predictions often are unreliable.³⁹ Taking into account actors cognitive limitations and motivational distortions can create regulations that more effectively achieve their purpose.⁴⁰

Two behavioral tendencies that should be considered when amending or writing regulations are loss aversion and moderation preference.

ii. Loss Aversion

A cost or penalty utilized in a regulation is more powerful than including an incentive. Under a rational basis model a penalty or a benefit are evaluated equally in terms of utility.⁴¹ Rational basis modeling assumes a person accepting a risk would charge the same as someone who is looking to eliminate this risk. But in empirical research a person accepting the risk demanded payment twice as high as the individual seeking to eliminate the risk.⁴² This can partly be related to individuals being unrealistically optimistic and therefore do not feel the risk will affect them.⁴³ But, it also shows people dislike losses more than they like equivalent gains.⁴⁴ Awareness of this propensity against losses can be incorporated in sustainability efforts by phrasing regulations in the negative. Empirically analyzing two regulations phrased either as (a) “you will lose \$x amount by not using energy conservation methods” or (b) “you will save \$x am

³⁷ Rational choice model which does not take into account the phrasing and construction of choice limits the

³⁸ Id.

³⁹ Id.

⁴⁰ Id.

⁴¹ The Coase theorem asserts that “subject to income effects, the allocation of resources will be independent of the assignment of property rights.” Daniel Kahneman, Experimental Tests of the Endowment Effect and the Coase Theorem. 1326

[http://www.uibk.ac.at/economics/bbl/lit_se/lit_se_ss06_papiere/kahneman_knetsch_and_thaler_\(1990\).pdf](http://www.uibk.ac.at/economics/bbl/lit_se/lit_se_ss06_papiere/kahneman_knetsch_and_thaler_(1990).pdf)

⁴² Id.

⁴³ Sunstein, How Law Constructs Preferences, at 2637.

⁴⁴ Id.

using energy conservation methods.” The phrasing used in (a) was substantially more effective due to our behavioral aversion to losses.⁴⁵

ii. Moderation Preference

Including multiple outcomes within a given regulation can allow for shaping individuals choices. Individuals disfavor extremes and given the choice tend to choose the moderate option among choices. This creates “compromise effects” where by introducing alternatives you are able to create extremes and nudge individuals towards the desired choice.⁴⁶ An example is the ability to have more individuals choose desired object “x” by introducing options both greater and less than “x”. The aversion to the extremes will cause most individuals to choose the option “x” based on its position as the middle ground option.⁴⁷

C. Our Proposal

We recognize there is no panacea to solve the issue of green buildings in the City. The City is positioned well to recognize and address this issue as both a proprietor and regulator of City buildings. Through our analysis of various methods that can be used to increase this green buildings we believe the adoption of various methods both conventional and unconventional will ensure the greatest likelihood for ultimate success.

The creation of a regulatory scheme tying impact fees to subsidies could effectively address both discouraging operating a less efficient building while encouraging adopting green buildings. Impact fees allow construction to bear the full societal costs of their projects. Impact fees would use a matching principal where the creator of the cost will also be responsible for

⁴⁵ See. Elliot Aronson, The Social Animal 124-5 (7th ed., 1995).

⁴⁶ Mark Kelman et. al., Context-Dependence in Legal Decision Making, 25 J. Legal Stud. 287-88 (1996)

⁴⁷ In one experiment subjects first reviewed several available Minolta cameras in a catalog. One group chose between a mid-level Minolta camera and a low-end camera; 50 percent chose each camera. Another group could also choose a third, high-end camera. In this group, of those choosing either the mid-level or low-end camera, 72 percent chose the mid-level camera. Id.

paying for the cost. Impact fees will be a very good method because they combine both the carrot and stick methods and will carry them out effectively. Fees would be imposed on specific harmful costs incurred by society on a sliding scale. For each negative impact three relative ranges based on the size of the project will be defined: poor, good, and excellent. These ranges will be defined by industry standards set by LEED. Projects within the “poor” range will be assessed an impact fee that will be based on the increased cost society incurs due to the wasteful or harmful method used during construction. Projects qualifying within the “good” range will not incur an impact fee. Projects within the “excellent” range will receive a subsidy based on the societal savings due to the decreased negative externality. The impact fees assessed on the “poor” projects will fund the subsidy program. This will create a cost neutral program that will spur more green buildings while also deterring harmful impacts within the City.

A review of the current laws in place should be done as numerous regulations have been passed since 2005.⁴⁸ This review should look to amend the language of the statutes to include recognition of the findings of both empirical studies and behavioral scientists’ findings. These measures include loss aversion, default provisions, and moderation preference.⁴⁹ This review should be mindful that addressing this issue on a city level

IV. Legal Analysis

The first challenge any green building legislation would have to overcome will be legitimizing the standard on which it is based. If fees are to be imposed in the name of sustainability, there must be some quantifiable link between the regulations imposed and increasing sustainability. Although a due process challenge to government land use regulations is unlikely to succeed because of the significant deference courts grant to local legislative

⁴⁸ In 2005, Local Law 86 was the City’s first recent law passed to encourage green buildings in the city and many more have been passed in the interim.

⁴⁹ Supra. Section III(B) Unconventional methods.

determinations. The lack of proven standards in the area of sustainability increases the probability that over-aggressive legislation, either too specific or too general will be successfully challenged as arbitrary, and unrelated to the public welfare.

In New York, and a number of other states, the LEED standard is used and codified into law as the benchmark green standard. Stating that for the purpose of the Green Residential Buildings Program “green residential building standards shall mean the use of design and building techniques sufficient to receive a second level or higher LEED certification.”⁵⁰ According to the U.S. Green Building Council (USGBC), the non-profit that administers the LEED rating system, more than 150 local governments have adopted LEED-based requirements or incentive programs impacting private-sector development. This trend continues to grow. These initiatives vary in their flexibility and complexity. For example, Scottsdale, which requires a relatively stringent LEED-Gold certification level for all new city buildings, admits of few, if any, exemptions. King County, Washington, on the other hand, requires green building practices for all building projects but allows a fair amount of flexibility in its implementation. While all covered projects are required to seek the highest potential LEED certification level, where project scope makes achieving a certain level infeasible, the state agency in charge of the project is required only to incorporate those green building practices that are possible using LEED criteria as guidance.

A number of legal issues arise in connection with these state and local initiatives. Local governments must have sufficient enabling authority to create green building programs. Without an enabling statute, a local government imposing LEED-based requirements must rely on either home rule authority or enabling legislation relating to broader zoning, subdivision, and building-related controls. A local government without home rule authority is often required to draw upon

⁵⁰ 21 NY ADC 508.4

a patchwork of statutory enabling authorities relating to zoning or building powers. Moreover, local municipalities' green initiatives may conflict with state or federal regulations. As a general rule, conflict with state law occurs if the state has preempted the area in which a local government seeks to regulate.

Many state and local green initiatives adopt private rating systems. This raises a possible improper delegation issue. A private entity, such as the USGBC, determines whether the project meets the mandated level of certification. As a result, a government entitlement or approval is tied directly to a private party's decision with respect to compliance. As a general rule, delegation of governmental functions to private parties is divided into two planes: (1) delegation of legislative powers, and (2) delegation of administrative powers or ministerial functions. A local government's delegation of legislative powers to a private party is a violation due process.⁵¹ Delegation of administration and ministerial functions presents a murkier picture. Courts look at various factors such as the need for local government to retain ultimate control; the right of a person aggrieved by the private entity to seek review before a local government body and the degree of discretion delegated to the private party.

Preemption was the problem in *Air Conditioning, Heating & Refrigeration Institute v. City of Albuquerque* where the United States District Court for the District of New Mexico issued a preliminary injunction against the City of Albuquerque, barring enforcement of its energy conservation code. The code required a minimum certification of LEED Silver for commercial and multi-family residential buildings, or a thirty percent energy efficiency improvement over the baseline energy efficiency standards for commercial buildings included in the ASHRAE 90.1 code. The court determined that the city was preempted from regulating the

⁵¹ See Brian W. Blaesser, "Discretionary Land Use Controls, Avoiding Invitations to Abuse of Discretion," (2007).

⁵¹ *Air Conditioning, Heating & Refrigeration Institute v. City of Albuquerque*, No. 08-633, Slip Op. at 23 (D.N.M. Oct. 3, 2008)

energy efficiency of heating, ventilating, and air-conditioning (HVAC) systems by federal law. The drafters of the code were “unaware of the long-standing federal statutes governing the efficiency of certain HVAC and water heating products and expressly preempting state regulation of these products.”⁵²

The issue of preemption has not been a major point of contention in local air quality regulations, because congress specifically delegates the power to regulate air quality to the states in 42 U.S.C.A. § 7401-7404. Therefore, in order for a local regulation to get preempted by the federal act, it must explicitly violate the federal rules by implementing standards more lenient than federally proscribed.⁵³

Perhaps a more troubling potential with these initiatives is their complexity and lack of clarity. A law or “ordinance is unconstitutionally vague when men of common intelligence must necessarily guess at its meaning.” Design standards contained within building ordinances have been struck down as vague in the past. Generally, such efforts have failed to pass constitutional muster, as they provide little or no guidance as to what is required. Standards such as “pleasing,” “harmonious,” or “rural, rustic, or non-urban characteristics,” have been found wanting.⁵⁴

While ordinances built upon specific “green” rating systems, such as LEED or Green Globes, provide a fair amount of structure as to what is required to achieve specific certification levels, they can present interpretive challenges. For example, the LEED-NC rating system provides points for “innovation in design.” Points provided under this category are subject to more subjectivity than points afforded under other design categories where the determination is based upon objective and measureable design characteristics.

⁵² Air Conditioning, Heating & Refrigeration Institute v. City of Albuquerque, No. 08-633, Slip Op. at 23 (D.N.M. Oct. 3, 2008)

⁵³ 42 U.S.C.A. §7401-7404.

⁵⁴ Broadwick v. Oklahoma, 413 U.S. 601 (1973).

Complexity is another challenge for these initiatives. The law presents a myriad of challenges for design and construction professionals. Nevertheless, these are challenges that must be met if critical energy and environmental goals required for sustainable development are to be achieved. Many policy requirements will be set forth as performance standards. Design and construction professionals are required to utilize their expertise to achieve these required standards. Care must be taken, particularly with respect to the design disciplines, to avoid contractual agreements to meet a specific standard, as this might be interpreted as a guarantee and compromise the designer's insurance coverage. For example, one of the mandatory requirements contained within the Minnesota Overlay is the predicted use of potable water being at least thirty percent below EPA Policy Act of 1990. This is a specific performance requirement. A design that fails to meet this requirement, may still be commercially reasonable and thus not the result of any particular professional error or omission. Nevertheless, this is a fine line as it is quite possible that the failure to meet a particular energy or environmental requirement could be the result of a design failure.

Care must also be taken with respect to those requirements that are stated in a more general manner. For example, one of the policy requirements is that indoor environmental quality be addressed through a number of strategies, including utilizing 'low-emitting materials,' 'thermal comfort,' without defining what these terms mean. Another challenge arises due to the various rating systems available for compliance with policy requirements.

To conclude the legal overview, any impact fee plan will be challenged on its own merits and clarity and not preempted by federal statute if its basis is clear and reliable such as LEED. However, this does not mean that the plan will move forward unhindered. There still could be liability on the part of the city for delays or errors in the process, or in the exact meaning of

certain key phrases either in the local or state statutes. So while the plan itself might not face large scale constitutional challenges, the enforcement methods and policies will be if those issues are not streamlined.