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LEED Building Ordinances for Local Governments

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I. Introduction

Local government ordinances requiring the implementation of green building standards in public buildings are increasingly common. Most of these ordinances adopt the Leadership in Energy and Environmental Design (LEED) Green Rating System, promulgated by the U.S. Green Building Council (USGBC). The LEED rating system sets forth nationwide standards for what constitutes green building. A building project can achieve LEED Certified, Silver, Gold, or Platinum status based on the number of LEED credits earned, resulting in reduced operating costs, reduced waste sent to landfills, reduced emissions of harmful greenhouse gases, healthier and more productive building occupants, and conservation of natural resources.

While local government ordinances regarding green building of public projects share similar structures, they vary depending on the organization of each local government and the unique challenges faced by that local government in implementing a mandatory green building program. This paper surveys local government ordinances and resolutions requiring public green building and discusses the possible variations and options available to a local government seeking to draft public green building regulations.

II. Basic Elements of a Green Building Ordinance

A. Purpose

It is helpful to set forth a detailed purpose for a green building ordinance to “provide insight into why the ordinance is being enacted.” For example, the public green building ordinance in Alameda County, California, contains the following “Findings”:

I. “Green” building design, construction, and operation can have a significant positive effect on energy and resource efficiency, waste and pollution generation, and the health and productivity of a building’s occupants over the life of the building.

J. Green building benefits are spread throughout the systems and features of the building. Building “green” can include, among other things, the use of certified sustainable wood products; aggressive use of high recycled content products; recycling of waste that occurs during deconstruction, demolition, and construction; enhancement of indoor air quality by selection and use of construction materials that do not have chemical emissions that are toxic or irritating to building occupants; modification of heating, ventilation, and air-conditioning systems to provide energy efficiency and improved indoor air; use of water conserving methods and equipment; and installation of alternative energy methods for supplemental energy production.


L. Requiring certain county projects to incorporate LEED green building measures is necessary and appropriate to achieve the benefits of green building.

M. Construction and demolition debris management and green design, construction, and operation decisions made by the county in the demolition, construction, and remodeling of county buildings result in environmental benefits and cost savings to the county over the life of the buildings. By calling on the county to include green building measures in its own facilities, the board of supervisors provides taxpayers a benefit through environmentally friendly, cheaper to operate buildings and simultaneously helps to develop markets for recycled, recyclable, and environmentally sound materials.

N. It is critical to both the economic and environmental health of the county that the county provides leadership to both the private and public sectors in the arena of energy efficiency and “green” construction. The most immediate and meaningful way to do this is to include energy efficiency and green building elements in as many public buildings as feasible.

The resolution adopted by Berkeley also has extensive findings supporting the use of LEED standards. The purpose of its green building resolution is:

[T]o enhance the public welfare and assure that further commercial and civic development is consistent with the City’s desire to create a more sustainable community by incorporating green building measures into the design, construction, and maintenance of its buildings; and . . . the green building practices . . . are designed to encourage resource conservation, to reduce the waste generated by construction projects, to increase energy efficiency, and to promote the health and productivity of residents, workers, and visitors to the city.

B. Level of Certification Required

Each ordinance sets the level of LEED certification the government wishes public building projects to achieve, usually LEED Certified or LEED Silver. One reason given by municipalities for adopting these specific levels of certification is that other cities of similar size have adopted similar levels. Municipalities requiring the Certified or Silver level often encourage city officials to achieve higher levels (i.e. Gold or Platinum) whenever possible. Scottsdale, Arizona, promulgated the first resolution requiring public buildings to achieve LEED Gold certification.

Examining Scottsdale’s green building program more closely reveals some of the factors city officials assess when setting the level of certification. First, Scottsdale found strong public support for a green

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6 See Email from Richard C. Field, ACC Environmental Coordinator, Athens-Clarke County Unified Government, to Darren Rowles, student, University of Georgia School of Law (Sept. 11, 2007, 15:06 EST) (explaining that the 5000 square foot figure utilized by Athens, GA, was arrived at, in part, because other communities had chosen that figure) (on file with author); Email from Don Spencer, Morgantown City Council, Seventh Ward, to Darren Rowles, student, University of Georgia School of Law (Sept. 17, 2007, 5:57 EST) (on file with author).

7 See Email from Michael Foster, LEED accredited professional, Green Building Program, City of San Jose, to Darren Rowles, student, University of Georgia School of Law (Sept. 14, 2007, 18:20 EST) (explaining that “while the minimum threshold is Silver (effective July 1, 2007), the Mayor and Council have directed staff to achieve LEED Gold or Platinum whenever possible”) (on file with author); Email from Don Spencer, Morgantown City Council, Seventh Ward, to Darren Rowles, student, University of Georgia School of Law (Sept. 17, 2007, 5:57 EST) (on file with author).

building program. The citizens rallied around the need to protect the Sonoran desert region, leading with green building practices in the private sector even before Scottsdale developed a public green building program. Additionally, city officials looked at the financial impact of green building, concluding that green building offered long term financial benefits. Based on these factors, Scottsdale concluded that a green building program requiring LEED Gold certification of public buildings would be successful.

In Alameda County, the county’s partners at StopWaste.Org helped Alameda determine that the Silver level of certification should be required in its Green Building ordinance. Alameda County concluded that the Silver level was a good fit for the county for two reasons. First, the Silver level set a realistic goal for the types of buildings being constructed at the time its ordinance was passed in 2003. Second, California was experiencing a recession at the time Alameda County’s ordinance was passed, and higher standards did not seem realistic. Today, the Silver level is only used as a baseline. One of Alameda County’s most recent projects was awarded a Gold rating from the USGBC.

A municipality may choose to not specify a particular level of certification at all. For example, Morgantown, West Virginia, does not specify a LEED level of certification in its resolution. Morgantown City


11 Email from Michael E. Cadrecha, Architect, LEED Accredited Professional, County of Alameda, to Darren Rowles, student, University of Georgia School of Law (Sept. 10, 2007, 12:25 EST) (on file with author).

12 Email from Billi Romain, Sustainability Coordinator, City of Berkeley, Office of Energy and Sustainable Development, to Darren Rowles, student, University of Georgia School of Law (Sept. 10, 2007, 12:25 EST) (on file with author).


14 Id.

15 Id.

16 Email from Don Spencer, Morgantown City Council, Seventh Ward, to Darren Rowles, student, University of Georgia School of Law (Sept. 17, 2007, 5:57 EST) (on file with author).

17 Id.


19 Email from Billi Romain, Sustainability Coordinator, City of Berkeley, Office of Energy and Sustainable Development, to Darren Rowles, student, University of Georgia School of Law (Sept. 10, 2007, 12:25 EST) (on file with author).

20 Email from Michael E. Cadrecha, Architect, LEED Accredited Professional, County of Alameda, to Jamie Baker Roskie, Managing Attorney, Land Use Clinic, University of Georgia School of Law (Jan. 17, 2008, 13:38 EST) (on file with Ms. Roskie).

21 Id.

22 Id.
Each [non-traditional] project is evaluated on a case-by-case basis to determine “green” goals that are most applicable and achievable. This determination is a consensus-based decision by the project team that typically includes all project stakeholders (capital project management staff, senior management, design consultants, green consultants, our client agencies, etc). Not requiring USGBC Certification [for these particular projects] saves the smaller projects the cost of USGBC administrative fees. . . . In addition, there are some building types or occupancies which may not find LEED totally applicable. One case in point was our Fire Department Vehicle Maintenance Facility. . . . It was determined by the project stakeholders that there were many LEED credits not applicable to this type of facility (carpet, composite wood, water efficient landscaping, etc.). While LEED has room for 4 innovation credits, there were many more “green innovation” measures than the 4 allowed in LEED that had the potential for dramatically improving the environmental performance of the facility (oil recycling program, proper clean-out of degreasers, filtration of truck wash effluent, etc.). Thus, in this case we used many green building principles that were not – at the time – part of LEED but still were good green practice for a building of this type. As time goes by and LEED continues to expand its range, these types of decisions may no longer be necessary but our ordinance was written to give us flexibility to make such decisions if LEED did not fit a particular situation. That is why the building ordinance uses general terms like “Green Building Practices” (there is more than just LEED out there) and “LEED Rating System” (the “system” continues to expand).

C. Applicability

Local green building regulations, like Scottsdale’s resolution, can apply to all public buildings. Regulations can also apply to both public and private buildings. At this point it is important to recognize the practical impact of the form of law that a municipality utilizes to promote its green building program. A municipality can either pass a resolution or an ordinance. The decision to expand green building practices to the private sector typically means that an ordinance, rather than a resolution, should be passed by the local municipality. As explained by Matthew Gigliotti, one of Kansas City, Missouri’s Assistant City Attorneys, generally speaking a resolution establishes policy for how a city wishes to operate, while an ordinance codifies the city’s policy decision and requires compliance by the city and others. Therefore, if a city hopes to expand enforcement of LEED ordinances to the private sector, a green building ordinance must be passed.

Two reasons were cited by various municipalities for deciding to pass a resolution rather than an ordinance for regulations that apply only to public buildings. First, passing a resolution is easier than passing an ordinance. Second, resolutions provide

26 Email from Richard C. Field, ACC Environmental Coordinator, Athens-Clarke County Unified Government, to Darren Rowles, student, University of Georgia School of Law (Sept. 11, 2007, 15:06 EST) (on file with author).
27 Email from Matthew Gigliotti, Assistant City Attorney, Kansas City, MO City Hall, to Darren Rowles, student, University of Georgia School of Law (Sept. 17, 2007, 12:11 EST) (on file with author) and Email to Jamie Baker Roskie, Managing Attorney, Land Use Clinic, University of Georgia School of Law (Jan, 8, 2008 18:18 EST) (on file with Ms. Roskie).
28 Email from Richard C. Field, ACC Environmental Coordinator, Athens-Clarke County Unified Government, to Darren Rowles, student, University of Georgia School of Law (Sept. 11, 2007, 15:06 EST) (explaining that Athens decided upon a resolution “[p]robably because it was easier – no lawyers”) (on.
the municipality more flexibility than ordinances. A municipality that does not want to “completely tie its hands on the matter of giving support to the green buildings principle” will most likely pass a resolution. Like Kansas City, a municipality may choose to start with a resolution before progressing to an ordinance to enforce green building standards. The advantage of an ordinance is that it is easier to enforce than a resolution because an ordinance is a rule of law whereas a resolution is simply a statement of policy.

Some local governments base the applicability of a green building ordinance on a project’s square footage, most commonly requiring projects exceeding 5,000 square feet to achieve the level of LEED certification contemplated by the ordinance. However, some policies do not apply until a project reaches 10,000 square feet. Spokesmen for different municipalities cited various reasons for arriving at their square footage figure. Richard Field, Athens-Clarke County, Georgia’s Environmental Coordinator, provided the most frequently cited line of reasoning for limiting the application of LEED to buildings exceeding 5,000 square feet:

We needed a reasonable breakpoint. There is a fair amount of sunk cost in registering, documenting and certifying a project that increases proportionally with decreasing project size. Other communities have chosen 5,000 sq. ft.

Morgantown also arrived at its 10,000 square foot figure based largely on the fact that other municipalities had used the figure. Another consideration that may play a role in a municipality’s decision to base the applicability of its green building program on a project’s square footage is the types of
buildings that are currently being developed in the municipality. Michael Foster, San Jose, California’s Green Building Coordinator, revealed that just prior to the city’s passage of its LEED policy “voters had passed a series of bond measures in 1998 and 2000 to build $1 billion in new libraries, community centers, police and fire stations.”

Because these facilities were mostly over 10,000 square feet, the 10,000 figure seemed like a “natural delineation” to the city council members in San Jose. A few green building ordinances base applicability on the cost of the project. For example, the Oakland, California Municipal Code requires public buildings with construction costs that equal or exceed $3 million to achieve a rating of LEED Silver. The Montgomery County, Maryland, green buildings law takes a different approach to cost, defining “county building” to mean “any covered building for which the County government finances at least 30%.” Covered buildings may include non-residential or multi-family residential buildings with at least 10,000 square feet of gross floor area.

Still other ordinances combine the square footage and cost requirements. Berkeley requires green building practices when a public project constitutes “5,000 gross square feet or more of occupied space . . . and has a construction estimate that exceeds $200,000.” While the Berkeley ordinance requires a public project to meet both the cost and square footage requirements for green building practices to apply, Atlanta, Georgia, takes a different approach. The Atlanta ordinance requires all public projects greater than 5,000 square feet or with a total cost of more than $2 million to comply with sustainable building practices.

In some ordinances, separate applicability provisions address the green building practices that the local government must incorporate into remodeled buildings. The remodel provisions often track the applicability requirements for new construction. For example, the Atlanta ordinance recites the same applicability requirement for “new construction and renovations,” defining “renovations” as “construction projects which consist of the installation or replacement of major building components . . . but excluding routine maintenance and repair items or operations.” Montgomery County is more specific, applying green building practices to public buildings that are “extensively modified,” defined as “alter[ing] more than 50% of the building’s gross floor area.”

D. Procedure/Compliance

The procedure to ensure a public building’s compliance with green building principles is the most widely varying aspect of the local government ordinances surveyed. Depending on the administrative structure of the local government, the ordinances vary in attributing responsibility for compliance with the ordinance. For example, the Atlanta ordinance relies on “[t]he commissioners of all city departments whose responsibilities include planning, designing, constructing, or renovating city-owned facilities.” Additionally, in Atlanta the “city’s environmental manager is responsible for coordinating to city departments any educational and technical resources available that support and promote sustainable design and construction of city facilities.”

The Athens-Clarke County resolution takes a committee approach, requiring the ACC Manager to “appoint a Staff Level LEED Committee to oversee the implementation of this policy and procedure and to make recommendations for their amendment. It shall be chaired by the ACC Environmental Coordinator (EC) and be representative of the departments involved

37 Email from Michael Foster, LEED accredited professional, Green Building Program, City of San Jose, to Darren Rowles, student, University of Georgia School of Law (Sept. 14, 2007, 18:20 EST) (on file with author).
38 Id.
39 OAKLAND, CAL., MUNICIPAL CODE ch. 15.35.030(1) (2005). Note that the applicability in this statute is part of the “Definitions” section. Id.
41 Id. Note that Montgomery County allows the use of rating systems other than LEED if these systems are equivalent. Id. §§ 8-49(a)(3), (b)(3).
43 ATLANTA, GA., CODE OF ORDINANCES § 75-19(c) (2003).
44 Id. §§ 75-18, 75-19.
46 ATLANTA, GA., CODE OF ORDINANCES § 75-20(a) (2003).
47 Id. § 75-20(b).
in planning, designing, constructing, inspecting, servicing, and maintaining public buildings.”

The committee approach is also utilized by Kansas City. Pursuant to the city’s green building ordinance, a multi-disciplinary committee is mandated to oversee LEED standards. Matthew Gigliotti of Kansas City supports the idea of getting representatives from all city departments to have input in ongoing LEED projects because “one’s chances of obtaining certification decrease if plans are not carried out with care.”

While some ordinances rely on a city official to promulgate regulations necessary for compliance, other ordinances set forth more specific procedures. The green building ordinance of the city of Livermore, California begins by designating a “Green Building Compliance Official,” defined as the city’s Community Development Director or his designee. The Compliance Official in Livermore is responsible for implementing any rules and regulations necessary to implement green building practices in compliance with the ordinance.

Additionally, the Livermore ordinance sets forth minimum requirements for the green building program. First, the ordinance requires the incorporation of green building practices into design and construction contracts for city projects. Second, the ordinance requires that the Compliance Official set forth standards specifying how bids or Requests for Proposals must incorporate plans to meet LEED standards. Further, all projects desiring LEED certification must have a LEED Accredited Professional on the project team. Third, the Compliance Official has the general responsibility of overseeing the city’s green building program. At a minimum, the Compliance Official must require a LEED checklist to be submitted with a public project’s building permit request and must insist that all building plans indicate the incorporation of green building measures in the notes or drawings. These requirements are typical of the general guidelines for establishing green building programs laid out by other local ordinances.

E. Waiver

Most green building ordinances contain a provision waiving mandatory green building standards. Some ordinances base waivers on cost: for example, if reaching the required LEED rating level would add more than 7% to the cost of the project or the payback period would exceed five years. Other ordinances provide for a waiver if attaining LEED certification would not serve the public interest in some way. Livermore provides for a waiver “in unusual circumstances where the City Council has by resolution found and determined that the public interest would not be served by complying with such...
provisions.\textsuperscript{60} Waiver clauses provide flexibility in the event of extreme circumstances like natural disasters or severe economic recessions.\textsuperscript{61}

Allowing for exemptions is particularly important in a municipality that builds unique buildings. As Billi Romain, Berkeley’s Sustainability Coordinator, explains, “It is important to be able to see if the United States Green Building Council has a LEED product appropriate to the project scope.”\textsuperscript{62}

Most ordinances provide that it is the responsibility of the local government official or committee overseeing the green building program to grant or deny the waiver.\textsuperscript{63} The contractor cannot request an exemption. Mr. Cadrecha explains this aspect of the waiver provision in Alameda County’s ordinance as follows:

Contractors and design consultants cannot resort to the waiver clause because the ordinance was not written for them and they have no “access” to any of its provisions. The ordinance was written and enacted to tell County staff what we, the staff, are required to achieve on projects. We ultimately determine what the green goals are on the project and tell our…teams what said goals are, they design to that spec, and the contractor has to build to that spec.\textsuperscript{64}

F. Miscellaneous Lessons Learned

The municipalities contacted about their green building programs were all asked to offer advice to municipalities considering adopting a green building ordinance. Since San Jose’s program went into effect in 2001, the city has learned the importance of “provid[ing] training to staff, ensur[ing] that capital dollars and operating dollars are not in conflict, [and] mak[ing] LEED decisions based on current facts/data.”\textsuperscript{65} In addition, San Jose learned that a green building policy/ordinance should be adopted prior to issuing bonds so that bonded projects are not exempted from the new policy.\textsuperscript{66} Finally, San Jose’s LEED accredited professional, Michael Foster, emphasized the importance of allocating resources to train staff before adopting a resolution or ordinance.\textsuperscript{67} “Not doing so will only create serious programmatic/implementation challenges in the future.”\textsuperscript{68}

Michael Cadrecha of Alameda County advised that governments developing green building ordinances should “incorporate rules and regulations that get embedded into everyday operations so that as people leave the agency (retirement, moving away, etc.), newly hired staff will be able to get on board with the program.”\textsuperscript{69} Mr. Cadrecha also provided a useful website containing model green building ordinances: www.stopwaste.org/home/index.asp?page=486.\textsuperscript{70}


\textsuperscript{61} Email from Michael E. Cadrecha, Architect, LEED Accredited Professional, County of Alameda, to Darren Rowles, student, University of Georgia School of Law (Sept. 20, 2007, 17:27 EST) (on file with author).

\textsuperscript{62} Email from Billi Romain, Sustainability Coordinator, City of Berkeley, Office of Energy and Sustainable Development, to Darren Rowles, student, University of Georgia School of Law (Sept. 10, 2007, 12:25 EST) (on file with author).

\textsuperscript{63} See, e.g., \textit{Athens Clarke-County, Ga., Policy/Procedure CEN-001}, III (allowing for exemption from green building requirements if approved by the Athens Clarke-County Commission) (Aug. 15, 2006), available at https://www.usgbc.org/ShowFile.aspx?DocumentID=2265 (last visited Dec. 4, 2007); \textit{Oakland, Cal., Municipal Code} ch. 15.35.050(B)(2) (2005) (contemplating “[t]he designation of an appropriate Compliance Official(s) who shall have the responsibility to administer and monitor compliance with the green building practices set forth in this chapter and with any rules or regulations promulgated thereunder, and to grant waivers or exemptions from the requirements of this chapter . . . .”).

\textsuperscript{64} Email from Michael E. Cadrecha, Architect, LEED Accredited Professional, County of Alameda, to Darren Rowles, student, University of Georgia School of Law (Sept. 20, 2007, 17:27 EST) (on file with author).

\textsuperscript{65} Email from Michael Foster, LEED accredited professional, Green Building Program, City of San Jose, to Darren Rowles, student, University of Georgia School of Law (Sept. 14, 2007, 18:20 EST) (on file with author).

\textsuperscript{66} Id.

\textsuperscript{67} Id.

\textsuperscript{68} Id.

\textsuperscript{69} Email from Michael E. Cadrecha, Architect, LEED Accredited Professional, County of Alameda, to Darren Rowles, student, University of Georgia School of Law (Sept. 20, 2007, 17:27 EST) (on file with author).

\textsuperscript{70} Id.
III. Conclusion

Local government ordinances requiring the incorporation of green building practices into public projects vary from place to place, based on the size of the city or county, the resources available, the local government’s administrative structure, and the local commitment to green building. Implementing comprehensive green building ordinances allows local governments to tailor the LEED rating system to that government’s needs. A good green building ordinance includes all of the elements discussed above while allowing for a certain amount of flexibility in its implementation and application.