



# Information Item

**Date: January 17, 2014**

To: Mayor and City Council

From: Dean Kubani, Sustainability Manager, Office of Sustainability and the Environment  
David Martin, Director of Planning and Community Development

Subject: Green Building Certification for Developments

## **Introduction**

Green building certification requirements have been included in several recent development agreement negotiations. On [May 14, 2013](#) Council approved a development agreement for construction of a project on Second Street that requires the developer to build the project to be equivalent to green building certification standards but doesn't require the developer to submit the project through the formal third party certification process to achieve green building certification. As there are currently many projects that may request a similar arrangement as part of a development agreement, this report provides background information about green building certification, costs and an analysis of policy options.

## **Background**

The City created some of the first green building code requirements in the nation which were precursors to the State of California's 2010 green building code requirements, also known as CALGreen. The CALGreen requirements implement certain sustainability standards for all new construction in the state. The City has adopted its own local amendments to this statewide code that implement more stringent requirements in certain areas like energy efficiency, urban runoff, and waste recycling.

For projects seeking additional development rights via development agreements, the City has typically negotiated higher levels of environmental performance through certification in the US Green Building Council's LEED rating system at the Silver level or higher. For some recent projects, including the project on Second street noted above, developers have requested that their development agreement allow them to construct their project to be "LEED equivalent" rather than to achieve actual LEED certification due to a concern about the extra costs that LEED certification could add to the project.

Under this equivalency concept, the project would still have to meet the sustainability performance required by a LEED certification but would have that performance verified, presumably by City staff, through an alternate unspecified process. This report reviews the LEED rating system, considers the issues of cost and equivalency and suggests policy alternatives going forward for projects seeking development agreements.

## **Discussion**

The LEED rating system was developed by the nonprofit US Green Building Council (USGBC) through a consensus-based, member-driven balloting process. The USGBC has almost 13,000 member organizations from a broad spectrum of building industry stakeholders: local government, manufacturers, architects, engineers, acousticians, landscapers, and real estate firms among others.

LEED is intended to be a leadership standard and a market transformation tool. As such it is regularly revised and updated to require higher performance than building codes and conventional practice, which also become more stringent over time. The version now in effect is LEED 2009 although a newer version, LEED v4, was recently released and projects can currently achieve certification under either version.

Typically there is a long transition period between versions and although LEED v4 is now the most current version the USGBC will allow projects to continue to register under the LEED 2009 version through June 1, 2015. Because of the long transition

period between different versions of LEED, projects in Santa Monica seeking development agreements are typically required to use the rating system that is in effect at the time of ARB submittal in order to ensure that projects are not using outdated rating systems and to provide certainty to the developer that the same rating system will be used throughout the project's design development phase.

While the LEED rating system is developed by the USGBC, certification is verified by the Green Building Certification Institute (GBCI). For legal reasons the entity developing the standard needs to be separate from the entity enforcing it.

LEED continues to be the most popular green building rating system in the US and is growing abroad. LEED's closest competitor is the system known as Green Globes, but until recently Green Globes allowed self-certification and so was not considered to be as robust as LEED. The Living Building Challenge ([www.living-future.org](http://www.living-future.org)) is another system that is growing in popularity however it sets a much higher bar than LEED by focusing primarily on implementation of net zero energy, waste, and water measures and therefore, has only been achieved by a handful of buildings.

There are four levels of LEED certification: Certified, Silver, Gold, and Platinum. LEED has several prerequisite elements that are required for certification. Beyond the prerequisites there are a number of credits worth various amounts of points. Projects can choose which credits to pursue and the final LEED rating is based on the total number of points that is achieved. There are 110 possible points under the LEED rating system. The point totals required to achieve each of the certification levels are as follows:

- **Certified:** 40-49 points (45+ points for LEED Homes)
- **Silver:** 50-59 points (60+ points for LEED Homes)
- **Gold:** 60-79 points (75+ points for LEED Homes)
- **Platinum:** 80+ points (90+ points for LEED Homes)

With the exception of LEED Homes/Midrise described below, LEED certification does not require the use of a consultant. The LEED rating system does give projects a point if someone on the project is a LEED Accredited Professional, but it is not mandatory.

LEED was originally developed for new commercial office buildings in suburban areas. With its growing acceptance as the leading industry standard, LEED has had to evolve and adapt to apply to vastly different types of construction, from single family homes to tenant improvements to schools and health care facilities. To address this there are now several different LEED rating systems. Most new projects are certified under LEED for New Construction (LEED NC), which is intended for new commercial building construction. This rating system addresses only the design and actual construction of a building and not its ongoing operations. In other words, a building cannot lose its LEED NC certification if it is found to have poor energy performance several years after it is completed.

There is another LEED rating system for Existing Building, Operations and Maintenance (LEED EBOM) that requires regular recertification and addresses a building's operations over its lifetime. LEED EBOM has been the fastest growing rating system over the past several years due to the economic downturn in new construction and due to its acceptance and use by major real estate portfolio owners.

In Santa Monica 25 of the 32 projects seeking development agreements fit a similar profile: primarily residential multifamily buildings, four to six stories tall with some ground floor retail. In the current version of LEED 2009 these projects would certify under LEED NC however under LEED v4 these projects would likely be required to use the LEED for Homes rating system or the forthcoming LEED for Midrise rating system.

LEED for Homes currently allows mixed-use residential/retail projects to certify under that rating system as long as more than 50% of the building's floor area is residential. LEED for Homes/Midrise works differently from LEED NC in several ways but one

critical distinction is that LEED for Homes/Midrise requires a Green Rater. This is essentially a “LEED inspector” who also can act as a consultant to the project team depending upon the project team’s needs and experience with sustainability. USGBC has also selected organizations around the country as “LEED for Homes Providers” to provide locally-based technical, marketing, and verification support services to builders. LEED for Homes Providers process and verify applications for projects seeking certification through LEED for Homes/Midrise. Conversely, LEED NC only requires that project documentation be uploaded to an online web portal and verified remotely by independent reviewers – there is no LEED “inspector” for LEED NC. LEED Homes/Midrise also requires that certain energy measures on the project like duct leakage and properly installed insulation be verified by an inspector. This is done through the Home Energy Rating System (HERS). HERS inspection has long been an optional element in the California Title 24 building code, but it is a required element of LEED. The HERS inspector and the LEED Green Rater can be the same person but are not required to be.

Staff analysis shows that by meeting State of California requirements and Santa Monica green building codes, and by virtue of building in Santa Monica with its excellent access to transit, open space, and infill opportunities, any new building in the city is likely to achieve at least 50 points of the 110 in the LEED rating system. This means that any project pursuing LEED certification in the City of Santa Monica is likely to achieve Silver level certification just by meeting minimum code requirements with no additional effort. As noted above Gold level certification requires 60 points and Platinum requires 80 points.

Staff analysis suggests that any new project in the city should be able to achieve Gold certification without much difficulty or additional cost. In recently approved development agreements, achieving LEED Gold certification has been established as a requirement for projects. It is likely that most new projects in the city could achieve Platinum level certification as long as that goal is established from the beginning, however it may

become very difficult or costly to try to achieve Platinum certification if that goal is established after design has begun. The City has established sustainability goals that exceed those of the State in terms of water self-sufficiency and energy reduction. For this reason, staff communicates these expectations to project developers as early as possible, often before an application is submitted, so that sustainability considerations can be incorporated in the project's site and building design.

### Costs

Staff has gathered information regarding costs of LEED certification through publicly available sources and through interviews with LEED consultants and professionals. The costs include administrative costs related to the submission and review of the application, consultant costs required as part of the certification process, and additional costs for building materials and components needed to obtain certain LEED points. The information presented below assumes that most of the projects pursuing development agreements in Santa Monica would follow the LEED Homes/Midrise rating system and represents a conservative estimate of the costs involved for certification.

The USGBC charges \$1050 to register a building and \$0.045 per square foot of building area to certify. The local LEED for Homes Provider charges \$2950 for processing and verifying the application and for quality control of the Green Rater network. For LEED Homes/Midrise, a developer must hire a Green Rater to verify green features as well as a HERS rater to verify energy efficiency measures – though as previously noted this can be the same person. If the project has central HVAC or boiler systems, a Commissioning agent may also need to be hired for approximately \$5000. A Commissioning agent works independently from the designer and contractor and inspects and verifies the proper installation and operation of technical building systems.

Table 1 below provides a breakdown of typical fees related to LEED certification for a 30,000 ft<sup>2</sup>, 40-unit apartment building.

**Table 1 Typical LEED fees for a 30,000 square foot Mixed Use Building (LEED Homes/Midrise)**

USGBC	\$2400 (\$1050 + \$0.045 x 30,000 sq. ft.)
LEED Homes Provider	\$2950
Green Rater	\$10,000
HERS rater	\$10,000
Commissioning Agent (if necessary)	\$5,000
<b>Total</b>	<b>\$30,300</b>

Of these fees, only the USGBC fee and the LEED for Homes Provider fee can be considered purely administrative. The fees for the Green Rater, the HERS rater, and the Commissioning Agent all contribute to improving the features, quality, and performance of the project. The fees for the Green Rater and the HERS Rater will increase somewhat proportionally for larger projects and the Commissioning Agent fee will scale more directly with complexity of the mechanical systems in the project. The lowest amount a small, simple mid-rise project would pay for the Commissioning Agent, the HERS rater, and the Green Rater is around \$15,000.

Aside from administrative costs, there may be other costs related to the sustainability strategies used to achieve LEED certification, such as the installation of solar panels, environmentally preferable building materials and high performance windows and other building components. There are several studies<sup>123</sup> that have examined cost premiums for different levels of LEED certification. Every building is unique, and while it is difficult to predict cost impacts for any individual building the existing research approximates that the following cost premiums in Table 2 apply for LEED certification. While most of

<sup>1</sup> [Cost of Green Revisited](#), 2007

<sup>2</sup> [Cost of Green in NYC](#), 2009

<sup>3</sup> [GSA LEED Cost Study](#), 2004

the existing research focuses on non-residential buildings, it is likely that similar premiums would apply to LEED Homes/Midrise projects.

**Table 2 Potential cost premium for LEED buildings (based on nationwide as-built project data)**

Certified	0 – 2%
Silver	0 – 4%
Gold	4 – 6%
Platinum	6 – 12%

It is important to recognize that these cost premiums are based on nationwide data. Most of the research on costs of LEED is over four years old and it is likely that costs to pursue LEED certification are even lower now due to the wide mainstream acceptance and availability of green building materials, products and practices. Furthermore, Southern California Edison offers free technical assistance through its [Savings By Design](#) program and up to \$150,000 per project in incentive money for projects that are more energy efficient than minimum code requirements (e.g. 10% better than Title 24), which helps them earn points towards LEED certification. If a project achieves certification, a one-time additional bonus cash incentive is awarded to the project through the program. As previously mentioned, simply by meeting the more stringent requirements in California and Santa Monica, any project is likely to achieve LEED Silver level with no additional design costs. This is consistent with conversations that staff has had with LEED consultants in the area. It is worth noting that several affordable housing projects recently completed by the Community Corporation of Santa Monica have achieved LEED certification at various levels. Most recently, the 32-unit multifamily CCSM project at 430 Pico achieved LEED Platinum certification.

In addition to cost studies, there is a growing body of research on the value that LEED certification adds to a building. The data that exists tends to show that buildings that have a green rating such as LEED or EnergyStar have higher valuations<sup>4567</sup>, command

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<sup>4</sup> [The Value of Green Labels in the California Housing Market](#), 2012

<sup>5</sup> [Effect of LEED rating on market valuation](#), 2009

premium rents, and have lower vacancy than buildings without a certification. This suggests that even if there is a cost premium to design a building to achieve LEED certification, there are also financial benefits to the owner of the building. It is also clear that the administrative costs required for LEED certification are insignificant relative to the total cost of the project.

### LEED Equivalency

Recently developers have requested that their development agreement allow them to construct their project to be “LEED equivalent” rather than to achieve actual LEED certification. Under this concept, the project would be designed to the same level of sustainability performance but would not go through a formal certification process by the GBCI. Instead, City staff would need to develop a process by which the sustainability performance could be verified. This verification would either be done by City staff or by a contractor hired by the City for this purpose.

For LEED NC projects, this process would be somewhat more straightforward since documentation is submitted online and verified by looking at building plans and contractor submittals. For LEED Homes/Midrise projects, performance is verified in person by the Green Rater who uses a combination of construction documents and on-site inspection. LEED Homes/Midrise also requires third party verification of certain energy related measures by the HERS rater and the Commissioning Agent. To be truly equivalent to a LEED Homes/Midrise certification, a project would have to retain the services of a Green Rater, a HERS rater, and possibly a Commissioning Agent.

Any process developed by the City to determine LEED equivalency would require a considerable level of effort and staff time and would introduce a new layer of complexity to the development review process. To cover the costs for LEED equivalency review staff would recommend establishing a review fee similar to the fees that are currently collected for building plan check and permitting. It is unknown what the level of these

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<sup>6</sup> [Doing Well By Doing Good](#), 2009

<sup>7</sup> [Economics of Green Building](#), 2010

fees would be but it is likely that they would be similar to or higher than the fees charged by the USGBC for LEED certification. This would negate the original intent of equivalency as a cost-saving alternative to actual LEED certification.

An alternative to a staff review process would be to have a LEED Accredited Professional (LEED AP) attest to the City that a project is LEED-equivalent. While LEED Accredited Professionals have taken an exam to document that they are familiar with the LEED rating system, it is not a credential or license that is recognized by the State and there is no accountability in the same way that architects or engineers are accountable for documents that they prepare. Furthermore, there is an inherent conflict of interest since a LEED AP would be hired by the developer for this task. The City would also have to develop a definition and requirements for LEED equivalency to ensure that each project is meeting similar requirements. For these reasons this alternative is not advisable.

### **Summary**

After analyzing existing research and evaluating anticipated development projects in Santa Monica, it is clear that that LEED Gold certification should be achievable for little or no additional cost for any new project in Santa Monica. LEED Platinum certification is likely achievable at a reasonable cost for any new project as long as that goal is established from the outset for the project.

Recently developers have requested that their development agreement allow them to construct their project to be “LEED equivalent” rather than to achieve actual LEED certification. The City does not maintain qualified or adequate staff to verify LEED equivalence and allowing LEED equivalence as an alternative to LEED certification would not reduce costs to the applicant since the City would seek to recover the costs of verification, whether through staff time or through contractor fees. Administrative costs of certification are minimal and creating a LEED equivalent alternative simply shifts the burden of verification from the third-party Green Building Certification Institute (GBCI),

which is qualified and experienced in this function, to City staff, which currently does not have the capacity or the necessary level of expertise to adequately perform this function.

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