LEED-CI ANALYSIS

June 2015

1350 AVENUE OF THE AMERICAS

To learn more please visit the sustainability section of our website: www.slgreen.com or contact Jay Black, SL Green's director of sustainability at jay.black@slgreen.com

SL GREEN REALTY CORP.

Prepared for
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Sustainability and Energy Management

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LEED CI 2009 Background

The LEED for Commercial Interiors (LEED-CI) 2009 program provides a set of criteria for certifying tenant and interior projects. The program was developed by the U.S. Green Building Council (USGBC) and unlike the whole-building approach set forth in the LEED-NC program, LEED-CI places emphasis on green office and retail environments that are healthy and productive spaces for employees and occupants alike. LEED for Commercial Interiors recognizes the power that tenants and designers have in making sustainable choices, although they may not have full control over whole building operations. Achieving LEED certification for a commercial interior space distinguishes the tenant as a socially responsible company dedicated to sustainability and staying ahead of the status quo.

The overall intent of LEED-CI is to assist in the creation of high performance, energy efficient, healthful, durable, affordable, and environmentally sound interior environments that reduce operation and maintenance costs. Similarly, prerequisites and credits under the LEED-CI program are comparable to other LEED programs, focusing on reduced water use, efficient energy and system performance, sustainable and low-volatile organic compound (low-VOC) materials, and enhanced indoor air quality.

The LEED certification system is a point based system comprised of different “green” measures spread over seven (7) categories of sustainability:

1. Sustainable Sites (SS)
2. Water Efficiency (WE)
3. Energy & Atmosphere (EA)
4. Materials & Resources (MR)
5. Indoor Environmental Quality (EQ)
6. Innovation in Design (ID)
7. Regional Priority (RP)

A CI space can accrue points by implementing a number of these credits where the higher number of points earned, the higher level of certification is obtained such that:

- **Certified:** **40-49 credits**
- **Silver:** **50-59 credits**
- **Gold:** **60-79 credits**
- **Platinum:** **80-110 credits**

While achieving a LEED-CI certified space may in large part be the result of tenant motivated sustainability measures, the selection of the correct base building and the sustainability characteristics of the building itself can greatly aid a project in achieving a LEED-CI certification.

LEED-CI Certification at 1350 Avenue of the Americas

For a space pursuing LEED-CI certification, characteristics of the base building itself can attribute a multitude of points towards certification. 1350 Avenue of the Americas provides base building characteristics and has implemented sustainable measures that may contribute up to 27 points towards a tenant space pursuing LEED-CI certification. This potentially provides any space beginning the certification process with more than half of the points required for certification. With minimal additional tracking during construction and adherence to the Construction Rules and Regulations for the building, any tenant build-out should be able to achieve a LEED-CI certification due to sustainability characteristics provided by the base building.

The following is a detailed description of the credits and characteristics at 1350 Avenue of the Americas that may contribute to a tenant's pursuit of LEED-CI certification. 1350 Avenue of the Americas provides a tenant project with 27 potential points, which is broken out as follows under the LEED credit categories:

Base Building Contributions Towards LEED-CI v3 Certification at 1350 Avenue of the Americas		
Sustainable Sites		16
Credit 1	Site Selection	
	Path 4: Heat Island Effect - Nonroof	**1**
	Path 12: Other Quantifiable Environmental Performance: Green Cleaning	1
Credit 2	Development Density and Community Connectivity	6
Credit 3.1	Alternative Transportation - Public Transportation Access	6
Credit 3.3	Alternative Transportation - Parking Availability	2
Materials & Resources		**3**
Prereq 1	Storage and Collection of Recyclables	Required
Credit 1.1	Tenant Space - Long-Term Commitment	1
Credit 2	Construction Waste Management	2
Indoor Environmental Quality		**5**
Credit 3.1	Construction Indoor Air Quality Management Plan - During Construction	1
Credit 4.1	Low-Emitting Materials - Adhesives and Sealants	1
Credit 4.2	Low-Emitting Materials - Paints and Coatings	1
Credit 4.3	Low-Emitting Materials - Flooring Systems	1
Credit 4.4	Low-Emitting Materials - Composite Wood and Agrifiber Products	1
Innovation in Design		**3**
Credit 1.1	Innovation in Design: Exemplary Performance, SSc3.1 Public Transportation Access	1
Credit 1.2	Innovation in Design: Exemplary Performance, SSc2 Development Density	1
Credit 2	LEED® Accredited Professional	1
	Total Points Contributed:	**27**

Figure 1: Credits 1350 Avenue of the Americas may contribute towards a LEED-CI Certification

SUSTAINABLE SITES (SS)

The selection of a building that addresses sustainability in both its site and development are of fundamental importance in the build-out of a sustainable CI space. This category under the LEED

program addresses building landscape, hardscape, and exterior building issues. The following are sustainable measures as they apply to LEED-CI credits and associated points that 1350 Avenue of the Americas may provide to a CI build-out within the building:

SSc1: Site Selection

Path 4. Heat Island Effect Non-Roof, 1 pt

The use of dark, non-reflective surfaces for parking, roofs, walkways, and other hardscapes contributes to the heat island effect by absorbing the sun's warmth, which then radiates into the surroundings. This results in increased cooling loads in the summer, while also resulting in detrimental effects to surrounding habitat and wildlife.

At 1350 Avenue of the Americas the parking garage is located underground and thus incorporated into the building footprint. This reduces the potential for heat island effect by reducing the amount of dark, non-reflective surfaces exposed to the sun's rays.

Path 12. Other Quantifiable Environmental Performance – Green Cleaning, 1 pt

The base building is currently implements a High-Performance Green Cleaning Program that would likely earn a tenant space a LEED point. The building uses highly sustainable cleaning products and has an effective cleaning and hard floor and carpet maintenance system in place. The building maintenance staff trains all personnel in green cleaning and the disposal of cleaning chemicals. Additionally, cleaning equipment for the base building meets LEED green cleaning requirements. Additional documentation will be required by the tenant to verify green cleaning practices are sufficient for LEED-CI SSc1, Path 12.

SSc2: Development Density & Community Connectivity, 6 pts

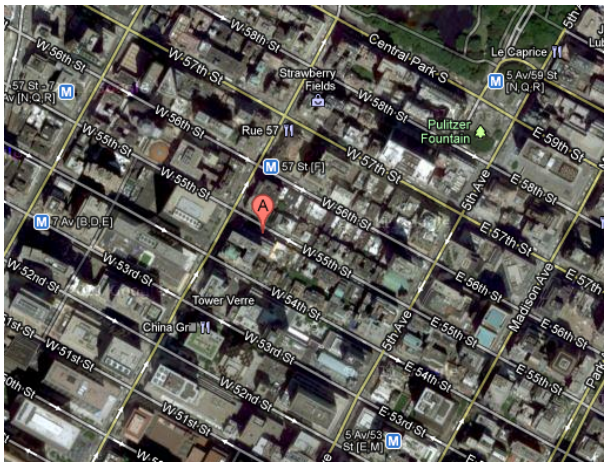

Image 1: Aerial image of 1350 Avenue of the Americas in Manhattan

The LEED program encourages tenants to choose space in areas with existing infrastructure to protect greenfields and preserve habitat and natural resources. Locating a Commercial Interiors project in an infill site helps control urban sprawl and uses existing infrastructure, including roads, utility services, and other reduction may be achieved by downsizing parking space for building occupants.

1350 Avenue of the Americas is located in midtown Manhattan – an established, walkable area with a minimum density which greatly exceeds that of a typical two-story downtown development, and provides access to countless community services.

SSc3.1: Public Transportation Access, 6 pts

To reduce pollution and land development as a result of automobile use, the LEED-CI program encourages tenants to choose space that provides access to alternative transportation modes. 1350 Avenue of the Americas is located within a 500 ft radius of several MTA subway stations, which provides

direct access to the F, N, Q, R, B, D, and E train lines, as well as multiple bus routes. The building is also one mile away from Grand Central Station, a major commuter hub linking commuters to MetroNorth service, which provides connections throughout New York State and Connecticut. This provides tenants an opportunity to commute in a more sustainable manner and reduce carbon emissions and single-occupancy vehicle use.

SSc3.3: Parking Availability, 2 pts

With a parallel goal to the credit described above, the reduction of automobile related pollution and land degradation, the LEED-CI program rewards projects where no parking is provided or subsidized for tenants. 1350 Avenue of the Americas does not provide tenants with any parking on or off site, which encourages tenants to commute using sustainable transportation alternatives. There is a public parking garage in the building, however it is not subsidized for building tenants.

MATERIALS & RESOURCES (MR)

MRc1.1: Tenant Space – Long-Term Commitment, 1 pt

In an effort to conserve resources, reduce waste, and reduce environmental impacts of tenancy as they relate to materials, manufacturing, and transport, the LEED program rewards tenants for signing a long-term lease. By arranging a lease term of a minimum of 10 years, tenants may gain 1 pt towards their LEED certification.

MRc2: Construction Waste Management, 1-2 pts

Building Management has in place construction rules and regulations that outline a waste diversion plan and waste diversion rates required during construction. By adhering to the construction waste management plan and utilizing the sample tracking documentation provided by the building, the tenant space may achieve 1 point for a 50% diversion rate or 2 pts for a 75% diversion rate.

INDOOR ENVIRONMENTAL QUALITY (IEQ)

IEQc3.1: Construction Indoor Air Quality Management Plan, 1 pt

Building Management has in place a construction rules and regulations policy outlining the required construction indoor air quality plan to be followed for tenant build-outs. The indoor air quality plan provided is aligned with LEED-CI credit requirements and may allow the project to earn 1 point towards certification.

IEQc4.1: Low-Emitting Materials – Adhesives and Sealants, 1 pt

Building Management has in place a construction rules and regulations policy outlining the required use of low emitting adhesives and sealants. The construction rules and regulations outline VOC limits for each type of adhesive and sealant, all of which comply with LEED-CI credit requirements.

IEQc4.2: Low-Emitting Materials – Paints & Coatings, 1 pt

Building Management has in place a construction rules and regulations policy outlining the required use of low emitting paints and coatings that comply with LEED-CI credit requirements.

IEQc4.3: Low-Emitting Materials – Flooring systems, 1 pt
Building Management has in place a construction rules and regulations policy outlining the required use of low emitting materials for carpets, carpet cushions and flooring sealants that comply with LEED-CI credit requirements.

IEQc4.4: Composite Wood & Agrifiber Products, 1 pt
Building Management has in place a construction rules and regulations policy outlining the required use of composite wood and agrifiber products with no added urea-formaldehyde resins. Adherence to this rule may gain the project 1 point under the LEED-CI program.

INNOVATION IN DESIGN (ID)

IDc1.1 Exemplary Performance: SSc3.1 Alternative Transportation, Double Ridership, 1 pt
Because the project site is in close proximity to several subway and bus lines, tenants are provided with the opportunity to commute in a more sustainable manner, and reduce carbon emissions and single-occupancy vehicle use. Because there are multiple possibilities for public transportation, an innovation point is available.

IDc1.2 Exemplary Performance: SSc2 Development Density, 1 pt
Because the project site is in midtown Manhattan, which has a development density that significantly exceeds the LEED requirement, tenants are provided with the opportunity to utilize existing infrastructure, decreasing the need for further development of greenfield sites. An innovation point is available to projects which have a density at least double that of the average within a specified area.

IDc2: LEED Accredited Professional, 1 pt
This credit is awarded to projects that have a LEED Accredited Professional as part of the project team. The building team for 1350 Avenue of the Americas has a number of LEED Accredited Professionals working with the building that will allow CI projects to earn this credit.

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