Sustainability in Practice | Bala Cynwyd Headquarters

Overview

Address:	401 City Avenue, Suite 901
City, State, ZIP:	Bala Cynwyd, PA 19004
Building Type:	Commercial Office
Project Size:	Approximately 22,000 square feet
LEED Certification Date:	2014

Manko, Gold, Katcher & Fox, LLP (MGKF) is an environmental, energy and land use law firm providing legal representation and counseling in regulatory compliance, permitting, transactional, litigation and regulatory enforcement matters. With 30 attorneys and two in-house technical consultants, MGKF is one of the largest environmental law firms in the Greater Philadelphia region. Sustainability is an important component of the firm's culture and professional practice. The firm takes pride in its commitment to providing the highest quality legal services to clients while also acting as responsible stewards for the environment. The firm's own sustainable business practices serve as a foundation for engaging clients and the community in the pursuit of sustainability.

MGKF is a leader in the field. The firm helped pilot the American Bar Association's Law Office Climate Change Challenge, joined the Greater Philadelphia Green Business Program as a charter member, founded the Sustainability Directors' Roundtable, and participates in the Law Firm Sustainability Network. Its lawyers serve on the Board of Directors of the Delaware Valley Green Building Council (DVGBC), the Mayor's Sustainability Advisory Board and various community Environmental Advisory Councils.

MGKF's geographic practice area is focused on the Mid-Atlantic; however they handle matters throughout the country and internationally. When they relocated their Bala Cynwyd, Pennsylvania headquarters office from the fifth to the ninth floor of their existing building at 401 City Avenue, MGKF used the US Green Building Council's Leadership in Energy and Environmental Design (LEED®) Green Building Rating System as a guide for sustainable design and construction. MGKF made the commitment to pursue certification of its new office suite under the LEED 2009 for Interior Design and Construction: Commercial Interiors (LEED-CI) Rating System in order to demonstrate market leadership, reduce environmental impacts, and

promote occupant health and well-being. The project achieved LEED Gold® certification. MGKF is the first law firm in the Philadelphia region to achieve Gold level certification under LEED for Commercial Interiors for its office space.

Design and Construction Team

Project Owner
Manko, Gold, Katcher & Fox, LLP
Bala Cynwyd, PA
http://www.mankogold.com

Architect of Record
Francis Cauffman
Philadelphia, PA
http://www.franciscauffman.com

Engineer of Record & Commissioning Agent
Wick Fisher White, Consulting Engineers
Philadelphia, PA
http://www.wfweng.com

Construction Manager
Skanska
Blue Bell, PA
http://www.skanska.com

LEED & Sustainability Consultant
The Sheward Partnership, LLC
Philadelphia, PA
http://www.theshewardpartnership.com

Site and Community

The project is strategically located on an established commercial corridor within a 15 minute drive to Center City Philadelphia. Across the street from 401 City Avenue is a large retail center with various restaurant and shopping amenities. The project has multiple connections to public transportation with access to the Greater Philadelphia region and beyond. Within a five minute walk of the main entrance are bus stops for routes 1, 38, 44 and 65, which in total, provide over 300 available rides per day.

The site is equipped with bicycle racks and shower facilities to promote cycling to work as an alternative to automobile use. According to US Census and American Community Survey,

2.16% of Philadelphia residents bike to work, which is the highest bicycle commuting rate among the ten largest cities in the US.

Alternative forms of transportation, such as public transportation and bicycling, can reduce emissions associated with commuting by automobile, while promoting healthy lifestyles and improved air quality.

Water Efficiency

MGKF selected low-flow plumbing fixtures to reduce potable water consumption. In total, MGKF uses 32% less potable water than a conventional office suite per LEED criteria. Reducing the amount of water used in buildings can preserve natural resources and minimize the burden on municipal water supply and wastewater treatment systems. MGKF installed low-flow plumbing fixtures inside the suite, including a shower and sink faucets. In addition, MGKF upgraded a core building restroom for further water conservation.

Energy Efficiency

Multiple elements of the project are designed to increase energy efficiency and to thereby reduce energy consumption in the office suite. According to the US Department of Energy, buildings consume approximately 39% of the energy and 74% of the electricity produced each year in the US. The MGKF office suite is served by electrical sub-metering equipment that measures electricity use within the tenant space (including lighting, plug loads and supplemental HVAC), allowing MGKF to monitor and take measures to control its actual electricity consumption.

According to the LEED Reference Guide for Interior Design and Construction, "For commercial interior projects, the reduction of interior lighting power stands to be the greatest energy conservation method available." Lighting fixtures were carefully selected to provide optimal light levels for a professional working environment, while using less electricity. The MGKF office suite is equipped with high-efficiency lighting technologies such as LED and compact fluorescent, which in total use 21% less electricity than a conventional office per LEED criteria. In addition, the suite is equipped with lighting controls to turn off lights automatically when spaces are not in use, such as a time clock and vacancy sensors. In addition, workstations are equipped with task lights to provide lighting control suited to the individual preferences and needs of occupants. Providing a high level of individual lighting control can promote productivity, comfort and well-being in an office environment.

MGKF relocated a majority of its computer equipment from its previous office suite, conserving natural resources and reducing waste. When purchasing computer equipment and appliances for the new space, MGKF sought to maximize its purchase of ENERGY STAR labeled items. The ENERGY STAR label recognizes improved energy efficiency in residential and commercial

products. In total, 97% of eligible computer equipment and appliances purchased for the new office are ENERGY STAR labeled. Often times, small sources can consume large amounts of energy when left on 24-hours a day, 7 days a week. As such, even the vending machines in the MGKF suite are connected to an occupancy sensor, so that vending lighting is turned on only when someone approaches the machines.

The suite's heating, cooling, and ventilation system is comprised of water-source heat pumps fed by a central base building condenser water loop. To ensure that all energy-related systems operate at maximum efficiency, MGKF contracted a Commissioning Agent to test the performance of installed systems. The scope of commissioning included the heating, cooling, and ventilation system and controls, lighting controls and domestic hot water system.

To offset greenhouse gas emissions associated with electricity generation, MGKF purchased green power for 50% of estimated electricity use over 2 years. The impact of MGKF's purchase of renewable energy certificates, or RECs, equates to 8,495 seedlings grown for 10 years or removing 69 passenger cars from the road for one year.

Material and Resource Conservation

MGKF implements a recycling program that collects paper, cardboard, glass, plastic and metal. All workstations are equipped with trash and recycling containers. In addition, MGKF collects and recycles mercury-containing lamps and electronic waste. Recycling minimizes the amount of waste entering landfills and incinerators.

The Construction Manager for the office suite developed and implemented a Construction Waste Management Plan for the project. In total, over 95% of demolition and construction waste was diverted from disposal. The construction team used a commingled recycling process, which collects waste into one container that is then sorted off-site at a recycling facility. The construction waste management program diverted wood, drywall, carpet, and acoustic ceiling tiles.

The firm also chose to relocate a majority of their furniture from the previous office space, thereby reducing the amount of virgin materials harvested and transported for manufacturing. MGKF was able to reuse 68% of existing furniture in the new office space, including desks, chairs, library shelving, and filing cabinets.

When selecting furniture and building materials for the suite, recycled content and local sourcing were carefully considered in the process. Local sourcing targets building materials and furniture sourced within 500 miles of the project site in order to reduce transportation impacts and support the regional economy. In total, the project achieved 42% regional materials and 20% recycled content.

The suite includes custom wood furnishings that were handcrafted at a local woodworking shop in King of Prussia, Pennsylvania. The reception area coffee table and the entry signage installed for the suite were crafted from a variety of reclaimed woods locally-sourced from multiple structures (circa 1870's to 1930's) in Pennsylvania.

Indoor Air Quality

The MGKF office space benefits from large windows that provide an abundance of natural light and stunning views of the Philadelphia skyline. Perimeter offices feature full-height glass walls bordering the interior hallway, so that daylight and views extend through to interior spaces and reduce lighting demand.

According to the US Environmental Protection Agency, people spend over 90% of their time indoors. The suite's ventilation system was designed to provide 30% additional outside air than a conventional office suite, creating improved indoor air quality.

Newly manufactured building materials and furniture can release indoor air contaminants called volatile organic compounds, or VOCs, which may be odorous or irritating to building occupants. Many people know VOCs as "new car smell" or the smell of fresh paint. Special emphasis was placed on selecting building materials and furniture that release little or no VOCs to create a safe, healthy indoor environment. Low-emitting materials installed in the project include: adhesives, sealants, paints, coatings, flooring, walls, ceilings, doors, and casework.

The Construction Manager implemented an Indoor Air Quality Management Plan during construction to keep the site clean and reduce indoor air quality issues related to dirt, dust and debris. The ventilation system was protected from impurities during construction through the use of air filters. Absorptive materials, such as batt insulation and acoustic ceiling tiles, were stored in a cold, dry space to prevent potential for damage or mold

Smoking near entrances, ventilation equipment or operable windows can introduce smoke and related contaminants to the interior of the building. As part of the LEED certification process, MGKF worked with building management to strengthen the existing no-smoking policy at 401 City Avenue. Signage was installed to designate an exterior smoking area and prohibit smoking within 25 feet of the main entrance.

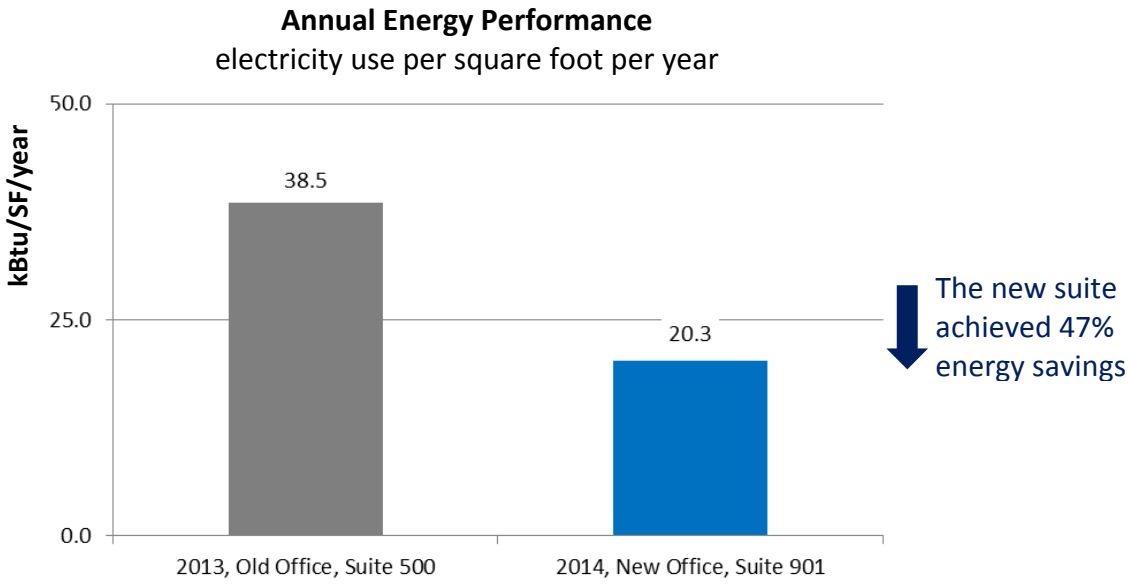
Ratings and Awards

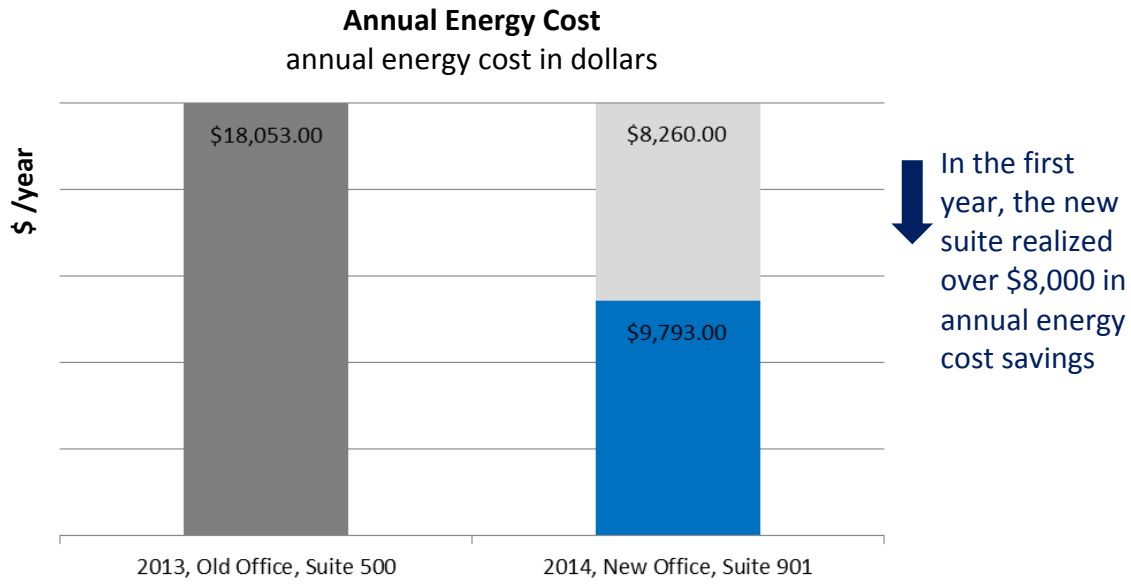
Administered by the US Green Building Council, the LEED Green Building Rating System is the internationally accepted benchmark for the design, construction, and operation of high-performance green buildings. LEED is an acronym for "Leadership in Energy and Environmental Design." The LEED Rating System is comprised of prerequisites and credits. Prerequisites are mandatory for certification. Credit points are optional and contribute to an overall point score.

Different levels of certification are awarded based on the total number of credit points, such as Certified, Silver, Gold or Platinum. The LEED Rating System measures initiatives in six areas: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, and Innovation & Design Process.

Measurement & Verification

MGKF utilizes ENERGY STAR Portfolio Manager, a free online program, to track energy consumption and cost. Since MGKF moved to a new suite in the same building, they have the unique opportunity to compare energy data between their old and new suites. The old office suite was initially fit-out in 1990, and expanded over the years. MGKF participated in the ENERGY STAR Green Lights program and upgraded the light fixtures throughout the old office suite from T12 lamps to more efficient T8 lamps. In total, the old office suite was less efficient than the new, LEED certified space. Both suites receive hot and chilled water from a base building central utility plant, so the energy values noted below do not encompass total office energy use; they are provided for comparison purposes only.





Prepared by The Sheward Partnership, LLC.