

# It's Good

# to Be Green

By Brock Grayson, LEED AP



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Not too long ago, the commercial real estate industry thought of green in terms of landscape design or perhaps the color scheme for an interior space. But today, as concern grows about air and water pollution, increasing energy consumption, waste production, and resource depletion, the industry is embracing the concept of green design. The U.S. Green Building Council describes Green Design as “Design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants.”

Environmental awareness is evolving from a political issue to a proactive Green movement. We are more aware than ever of our direct impact on the environment, so Green buildings are entering the mainstream. The U.S. Green Building Council (USGBC) developed and now administers the Leadership in Energy & Environment Design (LEED™) Green Building Rating System. The system serves as a design guideline as well as a standard certification scale for Green buildings to be measured against. Major American cities as well as several leading

Fortune 500 companies now require their buildings to be LEED-certified.

There are four levels of LEED Certification Awards:

1. LEED Certified: 26-32 points
2. Silver Level: 33-38 points
3. Gold Level: 39-51 points
4. Platinum Level: 52+ points (69 possible)

Points are distributed among five main LEED Credit Categories:

1. Sustainable Sites
2. Water Efficiency
3. Energy & Atmosphere
4. Materials & Resources
5. Indoor Environmental Quality

There is also a separate category for Design and Innovation. The overall goal is to achieve sustainable design, which the *American Institute of Architects Handbook* defines as “design that delivers buildings and communities with lower environmental impacts while enhancing health, productivity, community, and quality of life.”

To illustrate LEED goals and some techniques for achieving them, we will describe some Ware Malcomb sustainable design/LEED projects.

## Sustainable Sites

It is possible to reuse an existing building site for a Green Building project; however, it is also important to protect natural and agricultural areas. At Toyota's Lexus Corporate Headquarters renovation in Torrance, California, the amount of landscape turf was reduced so less water was used for irrigation. Landscaping with drought tolerant plants further reduced use of water needs. Canopies were added to both the North and South entrances to shield the doorways from the elements. The canopies had incorporated drainage systems to direct water to nearby planted areas for natural irrigation.

## Water Efficiency

Water efficiency is clearly important to the restoration and sustainability of sites. At the Lexus site, decorative hardscape such as gravel beds around the perimeter of the building reduced the required landscape maintenance and therefore water usage. Inside the Lexus Corporate Headquarters, low-flow fixtures and automatic sensors for sink faucets were specified to prevent waste and decrease the burden on the municipal water supply.

Another environmental concern is water treatment. A LEED-certified packing/distribution building for New Belgium Brewing Company in Fort Collins, Colorado combats this problem by treating all of the water the facility uses in its cooling and cleaning processes on site.

## Energy and Atmosphere



*Lexus Headquarters*

Lexus Headquarters project maximized the use of natural daylight by adding skylights and lowering the furniture panels to allow more light into the space. The New Belgium Brewing Company's roof was designed out of TPO, a reflective material

Energy efficiency can be optimized in a variety of ways. Lighting is a large factor. New energy efficient light bulbs, efficient lighting plan layouts and lighting motion sensors are helpful. The

designed to assist in cooling the building and to enable the use of a solar panel system in the future. Borg Redwood Fence Company's new building in Pleasanton, California, was designed with photovoltaic power cells on the roof. The cells produce the majority of the power used in the building and at times, provide enough power to actually turn the electric meter back, providing power savings. Home furnishings retail giant, IKEA became the first retailer in the United States to use the R4A refrigeration unit that results in no ozone depletion.



*Borg Redwood Fence*



*IKEA*

## Materials and Resources

Construction typically produces a lot of waste. To reduce and manage this waste, recyclable products made without the use of toxic substances are ideal. Toyota's "Process Green" initiative encouraged the recycling of 95 percent of the construction demolition materials produced during the Lexus renovation. Durable products with a long life expectancy are also classified as sustainable finish materials.

## Indoor Environmental Quality

Indoor foliage carefully placed improves air quality. In the Lexus Headquarters building, indoor plants were placed where the air circulation is at a maximum to improve the air within the enclosed office area. Low-odor interior paint and carpet adhesives were also used to reduce and manage the sources of indoor pollutants. Large windows placed in employee sightlines helped connect them to the outdoor environment. This contact is a factor in employee satisfaction.

Our environmental challenges appear more manageable when broken down into practical solutions. It may require additional effort to use natural

resources more efficiently and reduce the impacts of consumption, but it is within every industry member's reach.

## Green Is Good for Business

Beyond the general environmental benefits, why do companies make the effort to create, maintain, lease, or sell a Green building? Simply because, in dealing with a LEED-certified building, everyone wins, the broker representing the building is confident of its value and quality, and the occupant secures a comfortable environment for an ideal work-space.

Green buildings are more economically viable in a variety of ways. They lower operating costs by providing energy efficient mechanical, electrical, and plumbing systems. Lower operating costs within a self-sufficient building increases its

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durability and therefore its valuation. Natural lighting, improved air quality, etc., has been shown to enhance occupant comfort, health, and productivity. Companies will tend to stay in their comfortable environments thereby, improving retention and decreasing building vacancy.

Green and LEED-certified buildings are increasingly recognized as a national “brand.” There is a growing array of state and local government incentives for going Green. Other pluses are the marketing exposure on Green/LEED Web sites, media coverage, case studies, and so on. Lastly, given the increased pressure on corporate boards to be seen as sensitive to the environment, a LEED-certified building may make the difference between winning or losing a deal.

### About Ware Malcomb

Ware Malcomb is committed to be the best commercial-real-estate-focused architectural firm in the United States. Established in 1972, Ware Malcomb is a leading national architecture, planning, and interior design firm which provides professional services for commercial development and corporate clients throughout the United States and Mexico. Specialized experience includes the design of commercial office, industrial, technology, healthcare, and retail facilities, as well as auto dealerships. The firm has offices in Chicago, Denver, Irvine (corporate headquarters), Los Angeles, New Jersey, Northern California, Phoenix, Sacramento, and San Diego.

Ware Malcomb are members and sponsors of several SIOR chapters throughout the United States. For more information regarding Ware Malcomb, please visit [www.ware-malcomb.com](http://www.ware-malcomb.com).

### Did You Know?

“The U.S. General Services Administration requires all building projects starting design in 2003 meet LEED certified level standards with a target of LEED silver.”