

Workplace ROI Through LEED-CI

Enhancing the workplace return-on-investment with tangible performance goals driven by smart LEED-CI strategies

By Rob Moylan, SmithGroup

Green buildings have long been called high-performance buildings in Europe and in thought-leader segments of the U.S. facilities market. The idea is that while green is good, sustainable design is also proven to support better human factors and business results.

Experience – and related research – bears out this thinking. The U.S. Green Building Council’s LEED rating program, for example, is widely seen as a way to improve a building’s environmental profile and energy usage. Yet it’s also been proven to boost workplace effectiveness and return on investment (ROI). A 2009 Michigan State study found that groups moving to LEED office buildings missed less work and put in almost 39 hours more per person annually. The total bottom-line benefit from gains related to fewer allergic reactions, reduced stress, and the productivity boost ranged from \$69,601 to more than \$250,000, **the study showed.**

Yet there are even greater returns. Today, leading companies and institutions are using LEED for Commercial Interiors (LEED-CI) – which certifies the sustainability of tenant improvements and interior renovations – as an opportunity to transform their business culture and even enhance their brand. Add to that gains in energy efficiency and the market value of a space, and it becomes hard to imagine not building green.

The key to linking LEED to ROI and other valuable measures of core organizational effectiveness is to plan early and strategically. The experience of several leading office tenants across the country demonstrates why, highlighting how a half-dozen lines of attack, often implemented jointly, create measurable value through green interiors. What’s more, these six tactical solutions are surprisingly achievable and economical when LEED-CI is viewed as integral to project planning rather than as an “add-on” to interiors projects (see sidebar). The examples show how these organizations thought performance could be improved, why they chose LEED-CI as part of the answer, and what it has delivered.

1. Corporate brand performance.

Viewed as critical to competitiveness, branding has practically become its own industry in recent years. For many organizations, environmental stewardship is seen as central to brand identity: It’s the right thing to do, for their own people and society at large. So a workplace build-out to LEED standards simply reinforces these core values.

The power-plant engineering firm Sargent & Lundy saw the 2008 relocation of their Phoenix regional office as a way to symbolize their expertise and forward-thinking attitude on global energy issues. Not surprisingly, the LEED-CI Silver build-out features energy-efficient lighting



Daylighting for the open office workspace at the HON Company headquarters was achieved by moving private offices from the building’s exterior and opening light wells throughout the existing structure.

and systems. But more than that, the 14,000-square-foot open environment appears collaborative and interactive, reflecting the firm's consulting approach. Wall-free clusters of sun-drenched workstations with mobile components encourage flexibility and communication, while designated "quiet rooms" allow privacy behind closed doors. Glass, light-toned wood and stone give tactile evidence of Sargent & Lundy's green streak.

In a similar move, healthcare software developer Burgess Group, based in Alexandria, Va., saw LEED-CI as another way to reinforce its image as a large, stable company – both for employees and for customers. As in the case of Sargent & Lundy, corporate goals intimately connected to the company's brand drove project decisions, as much as energy efficiency or workplace comfort. The result is a statement to the outside world – and to employees – that resonates with the tenant's identity and mission.



At the heart of the HON Company headquarters' work culture is open communication, which is facilitated by lounges and impromptu meeting areas grouped around light penetrations in each quadrant.

2. Human performance.

Among the benefits of LEED cited in studies like the Michigan State report are direct gains in quality of life and overall health for office workers. These improvements come from better indoor air quality (IAQ), increased daylighting, and other changes seen to enhance morale or reduce stress. The bottom line: Happier, healthier, more relaxed employees tend to produce better work.

This thinking informed the planning of a 68,000-square-foot headquarters for the HON Company. The furniture maker chose to renovate its 100-year-old former window sash factory in downtown Muscatine, Iowa, reaffirming its commitment to the local community and business line in the process. Using the historic language of exposed brick and timber with new interior construction, HON created a clean, contemporary look in flexible and open loftlike spaces. The effect on employees working in the renovated space, who report gains in output and work enjoyment, quickly validated HON's approach. The facility, targeting LEED-CI Silver, was designed to be "open, productive and approachable," according to HON executives.

Similarly, the headquarters of Burgess Group (targeting Gold certification) were installed in a well-located new building with a green roof and bicycle facilities. Glass-walled offices and open workstations allow daylight deep inside office areas. Recycled materials, low-flow fixtures, and GreenGuard-certified finishes are often touted by employees of this healthcare software developer. Beyond pride of place, Burgess Group workers are now more effective and efficient, says the company.

3. Organizational performance.

By exploiting a LEED-CI renovation as a means for strategically reconfiguring the workplace, savvy occupants have improved organizational functioning, too. In this case, the bottom-line gains go beyond productivity to measures of work satisfaction such as reduced employee turnover and improved recruitment. Anecdotal and measurable improvements to organizational effectiveness include increased interaction, reduced email volume, and shorter product development cycles.

For a Microsoft sales office in Chevy Chase, Md. LEED-CI strategies were integral to designing a space that would entice road warriors to spend more time with colleagues in the home office. The interiors needed a timeless aesthetic appeal that would suit a broad demographic spectrum including retired generals and recent college grads. Company executives say the LEED-CI features – and the label itself – have helped galvanize the team.

HON's Muscatine workplace offers similar conclusions. The company's transparency and openness is reflected in open perimeter areas, sunlit atriums and light wells, and even a glass-enclosed boardroom. Employees – called "members" there – enjoy casual meeting areas and a café during the workday.



Microsoft Corporation's Chevy Chase Sales & Development office features reclaimed materials mixed with high-tech surfaces to convey a timeless space reflective of the company's commitment to sustainability.

Debunking Myths of LEED-CI

The experiences of the companies earning LEED-CI – and of their architecture/engineering firms – do more than show the value of LEED. They also debunk myths about green building. A few of the most pernicious:

Tenant improvements using LEED-CI cost more.

- Not necessarily, say experienced facilities professionals. If tenant installation (TI) dollars are optimized to include LEED, there need not be any price difference. For its headquarters, the not-for-profit Easter Seals targeted LEED from the beginning, and earned Silver certification well within its estimated TI costs.

There's no proven connection between LEED and company performance.

- Fortunately, facilities managers and owners now have lots of research to back up performance claims. End-user studies and industry research by groups like Pittsburgh's Carnegie-Mellon University and the Heschong-Mahone Group, Gold River, Calif., have shown evidence of direct improvements in productivity among workers resulting from improved lighting, view, ventilation, and air-temperature conditions, which are central tenets of green building. These and other results bear out the connection between LEED and improved personnel and organizational results.

Green materials cost more.

- That may have been true in 2003. Today, with more options than ever, materials and products for LEED jobs need be no more expensive than any others. Still, a typical TI fit-out can incur a premium of 2-4% in construction costs for LEED integration due to added planning and administrative time. This cost is typically recouped within 3 years – on a 10-year lease, that still leaves seven years of operational savings.

LEED adds to the project scope and schedule.

- Neither is correct – unless LEED-CI certification is treated as an afterthought. When a project team starts from day one with a LEED-CI strategy, experience shows it will not require more design and construction time. HON's LEED Gold showroom took only six months to plan, program, design and construct; their 67,000-square-foot headquarters was delivered in a calendar year. The Burgess Group planned and installed 67,000 square feet of LEED-CI workplace in only nine months.

Word to the wise: Start planning as soon as possible. In fact, for maximum points and possible Platinum certification, LEED-CI should commence at building selection and during lease negotiations, as 50% of available points are determined during these phases.

4. Cultural performance.

The HON headquarters – as well as the company’s new showroom at Chicago’s Merchandise mart – also speak to the cultural benefits of LEED-CI. The precepts of green building have been shown to support such intangibles as customer relations, internal camaraderie and personal work satisfaction. The Michigan State study shows that IAQ, daylighting and views to the outdoors correlate with the highest post-move increases in employee satisfaction.

The law firm Bowman and Brooke LLP took advantage of this cultural aspect in creating its Minneapolis headquarters. First, the firm takes pride in not seeming like a typical buttoned-down litigator, and they saw LEED-CI certification as a chance to be the first of their kind to differentiate from competitors. Second, the firm’s directors wanted a fresh, bright feel, not the dark, wood-paneled foxholes so common in the legal field. Third, LEED-CI would be another reminder that Bowman

and Brooke does what’s right for their clients, employees, and community. The resulting renovation – with its three-story open stair and innovative materials – ties into the firm’s brand identity while also supporting its personality and cultural uniqueness.

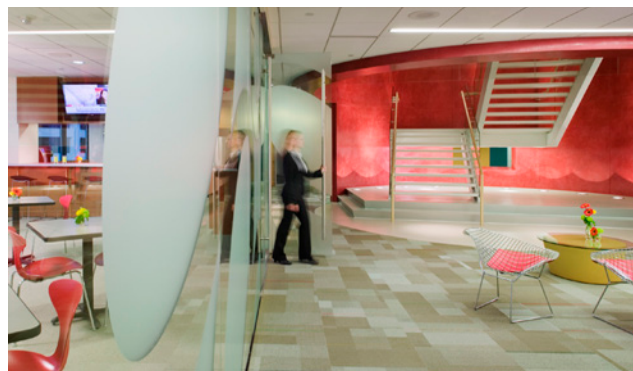
5. Energy performance.

Another significant and highly tangible performance gain for LEED-CI installations is reduced utility costs. The occupying company’s energy savings can be reinvested immediately into the business, and the reduced carbon footprint benefits the community and environment as a whole. As one might expect, the power-plant designers at Sargent & Lundy were especially motivated to showcase energy-saving technologies. From simple ideas such as passive solar daylighting integration to “seamless electronic interfacing with staff and resources” at their Chicago headquarters, which cuts travel expense and waste, the design spared few energy-saving ideas.

Similarly, construction and real estate development firm The Christman Company in Lansing, Mich., recycled a former power plant into an energy-efficient headquarters, earning dual-Platinum LEED for both commercial interiors and core-and-shell (LEED-CS). The building beats minimum requirements for efficiency by 34%, cutting CO2 emissions by more than a million pounds per year. A T5 fluorescent lighting system on occupancy sensors and daylight-regulated dimming cuts electricity needs by 27%. According to Christman, a web-based Building Management System (BMS) tracks power usage at the sub-tenant level to encourage conservation, but even the power used is green: Every kilowatt-hour of electricity for the headquarters is offset by renewable wind-energy certificates.



The Christman Co. transformed a derelict 1928 building into a high-performance workplace. The headquarters achieved the world’s first “Dual Platinum” LEED certification from the USGBC: (LEED-CI and LEED-CS).



Not your typical law firm: bold use of color, community-focused employee amenities and a three-story connecting stair highlight Bowman and Brooke’s commitment to culture and sustainability.

