

UC Office of the President Earns LEED® Silver

The University of California (UC) continues to be a leader in sustainable business practices. Over the past several years, UC has adopted comprehensive policies that will improve its environmental performance. The implementation of these policies at a system-wide level will make each of the ten UC campuses a leader in climate protection, clean energy, green building, sustainable transportation, environmentally preferable purchasing, and waste reduction.

Before crafting an expanded green building policy, the UC Office of the President (UCOP) recently piloted a range of sustainable operations and maintenance practices at its own headquarters, located in downtown Oakland. The Franklin Building is now certified under the U.S. Green Building Council's Leadership in Energy and Environmental Design for Existing Buildings program, or LEED-EB. Building on the success of this project, UC policy now requires all campuses to submit one building for LEED-EB certification by June 2008. UCOP is pleased to announce that the Franklin Building achieved a Silver rating. UCOP will use the valuable lessons learned through this project to aid campuses undertaking certification in the near future.

This case study provides background on UC's sustainability program and gives highlights of the Franklin Building's LEED-EB achievements.

History of Collaboration

UC students first brought the issue of environmental sustainability to the UC Board of Regents in 2002. Since then, UCOP has worked with students and campuses to develop the sustainability policies described below. The resulting initiatives have gained the University national recognition, and demonstrated the unique role that higher education can play in addressing global warming and other pressing environmental issues.

UC Policy on Sustainable Practices

In June 2004, UC President Robert Dynes issued guidelines for the Policy on Green Building Design and Clean Energy Standards. This comprehensive policy established the University as a leader in promoting environmental stewardship among institutions of higher education.

In January 2006, the policy was expanded to include sustainable transportation practices and greenhouse gas emissions

reductions. In March 2007, the policy was further extended to cover the areas of green building renovations, sustainable operations and maintenance, waste reduction, and environmentally preferable purchasing. With the most recent expansion, the policy was renamed the "Policy on Sustainable Practices." The policy can be viewed online at: www.ucop.edu/facil/sustain/

Greening the Franklin Building

The Franklin Building achieved a total of 40 LEED-EB points, earning it a Silver certification level. The building earned credits in every LEED category, which represents a wide range of operations and maintenance improvements that impact both environmental and human health. Highlights of the building's achievements are described below under the headings of the six LEED-EB credit categories.



Sustainable Sites

The rooftop terrace garden is now maintained using sustainable landscaping practices. The leaf blower and gas-powered soil tiller have been replaced by brooms and shovels. Conventional fertilizers are no longer used in the garden. Instead, compost and mulch are applied once each year, followed by the release of earth worms. Roundup and other forms of chemical weed control have been exchanged for least-toxic pesticides. All green waste generated by the garden is composted.

Water Efficiency

The East Bay Municipal Water District (EBMUD) performed a free irrigation audit to ensure that the irrigation equipment was functioning properly and was not over-watering the landscape or watering the concrete instead of the plants. EBMUD also donated low-flow faucet aerators for all restroom sinks in the building.

Energy and Atmosphere

Several energy efficiency retrofits to the building's lighting system were funded by a partnership between UC, the California State University, and the state's investor-owned utilities. This partnership also provided incentive funding for a monitoring-based commissioning project to inspect the building's HVAC system and install permanent utility sub-metering. This will allow continuous monitoring of building systems and enable staff to identify and fix problems that are

wasting energy. The annual utility cost savings are anticipated at roughly \$26,500, giving the project a simple payback of less than 3 years. However, taking the utility incentive money into account lowers the project's payback to less than 1 year. The upgrades will then provide significant energy cost savings for the foreseeable future.

Materials and Resources

Numerous sustainable practices have been implemented at the Franklin Building that earned credits under the Materials and Resources category. Some of the highlights include:

- All of UCOP's unwanted computers, monitors, faxes, chairs, phones and other equipment are re-used internally or re-sold, donated or recycled through UC Berkeley's Excess, Surplus and Salvage program.
- A new waste management policy stipulates that 75 percent of all construction waste must be diverted from landfills and incinerators through re-use or recycling.
- A new purchasing policy addresses the sustainable procurement of office paper, office equipment and supplies, and furniture. Sixty-eight percent of the building's total purchases now qualify as green under the criteria set by LEED-EB.
- All janitorial paper products meet the requirements of the U.S. EPA's Comprehensive Procurement Guidelines.
- Climate Neutral certified carpet tiles, donated by Interface Flooring, were installed in all of the building's elevators.
- A new indoor air quality policy mandates low volatile organic compound levels for all adhesives, sealants, paints, coatings, carpet, carpet cushions, composite panels and agrifiber products.
- A new composting program combined with a desk-side mini-bin system that emphasizes recycling has raised the building's waste diversion rate to just over 60 percent.
- The Franklin Building now uses very low mercury fluorescent light bulbs. UCOP needed to find a new distributor in order to purchase these bulbs, and has realized annual savings of

over \$5,000 by purchasing this environmentally preferable product.

Indoor Environmental Quality

A new green cleaning program uses products that are Green Seal-37 certified. The switch to green cleaning is a healthier choice for the environment, occupants, and maintenance staff at the Franklin Building. The program also mandates that hand soaps contain no antimicrobial agents and floor stripping products are free of zinc.

Innovation

UCOP launched a Departmental Sustainability Coordinator Program to directly involve building occupants in the LEED-EB process. The Coordinators performed extensive outreach to their departments, raising general awareness of and support for the LEED-EB project and its associated operational changes.

The Program was comprised of at least one representative from most UCOP departments, including a number of departments located outside the Franklin Building. Including off-site departments created a mechanism for extending the sustainable practices implemented at the Franklin Building, thereby increasing the project's impact.

The coordinators were especially effective in identifying potential improvements to the building's recycling program and in training colleagues on the proper use of new recycling and composting bins. They contributed significantly to source

reduction by educating their respective departments about paper use reduction and programs to exchange surplus materials between departments, thus avoiding unnecessary purchases. The Coordinators also transitioned their departments to purchasing 30 percent (or in some cases, 100 percent) post-consumer recycled content paper.

The Sustainability Coordinator Program also took steps beyond the LEED-EB program and started a Community Supported Agriculture drop-off. A box of local organic produce is now delivered to the Franklin Building each week for participating UCOP employees.



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