University of California, Berkeley

Operational Excellence

Campus Energy Office

UC Berkeley currently spends more than $17 million annually to supply electricity to the central campus, yet users rarely know how much energy they use or how much it costs. Instituting a high-profile Energy Office to track, oversee, and manage energy usage will not only result in significant cost savings but will improve building comfort and environmental performance campus-wide.

Summary

Energy costs, a significant component of the campus budget, have been rising at a rate of nearly 2% per year—and nearly 33% since 1990. Even as usage and costs increase, building occupants have no real knowledge of how and where energy is used. While UC Berkeley is currently viewed as a leader on environmental sustainability, to maintain that status it must institute high standards for energy use and management.

A centralized Energy Office will establish visible leadership and on-campus presence for the Energy Management Initiative, clearly demonstrating the University's a commitment to a new approach to its building design and operations.

The new Energy Office will track, monitor, and manage energy usage campus-wide to reduce energy costs; improve design, performance, and operation of buildings; and provide feedback on energy usage to building occupants. It will continuously monitor the operations and maintenance of campus facilities and will be in contact with Building Managers regarding their facilities' operation and utility consumption. The Energy Office will oversee the installation of software and of video monitors that will display energy usage in buildings. Utilizing campus utility data, the Energy Office will also design and implement an incentive program to encourage energy conservation behavior at the unit and individual level.

Delivering the Vision

Instituting an Energy Office will help achieve the vision of Operational Excellence by reducing costs, more-effectively utilizing resources, and instilling a culture of continuous improvement. Creating the Energy Office will require an on-going investment of approximately $1.95 million/year and an upfront investment of around $550,000 for meters, dashboards, and software, plus approximately $330,000 in annual on-going costs. By fiscal year 2016, the savings directly associated with the Energy Office are expected to be around $2.3 million per year. A majority of the other projected savings ($1.4 million) associated with the Energy Management Initiative is also dependent on the establishment of this office. By fiscal year 2016, the savings directly associated with the Incentive Program are expected to be $740,000 per year.

Timeline

Instituting an Energy Office, one component of the Energy Management Initiative, will be undertaken in a phased approach that initially focuses on two sections of the campus. The Energy Office will be launched in the fall of 2011, with the launch of incentive program shortly thereafter. Software and video displays showing energy usage by building will be installed throughout the spring of 2012.

Leadership

Sponsor: Edward Denton, Vice Chancellor, Facilities Services

Functional Owner: Chris Christofferson, Assistant Vice Chancellor, Physical Plant and Campus Services

Project Manager: Sara Shirazi, Associate Director Campus Facilities

For More Information

Complete copies of the Energy Management Business Case as well as the Request for Resources and the proposed budget for Instituting an Energy Office can be viewed online at the OE web site at http://oe.berkeley.edu

Questions and comments about this proposal for the initiative team: saveenergy@berkeley.edu

Questions about Operational Excellence: oe@berkeley.edu