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A PROPOSAL TO USE UIUC STUDENT CLEAN ENERGY TECHNOLOGY FEES TO IMPROVE THE ENERGY EFFICIENCY OF THE ILLINI UNION

PURPOSE: To improve the energy efficiency of the Illini Union and to educate the University of Illinois at Urbana-Champaign (UIUC) community about how to conduct a basic energy audit and implement energy conservation measures.

GOALS:

1. Conduct an energy audit of the Illini Union and implement selected energy conservation measures.

Funding

The Energy Subcommittee of the Committee for a Sustainable Campus Environment (CSCE) will allocate \$40,000 to \$50,000 towards an energy audit and selected retrofits of the Illini Union. These funds are available/have been allocated from the \$2 per student per semester clean energy technology fee at the UIUC. The Energy Subcommittee is prepared to assist in identifying additional funding sources (e.g. Illinois Clean Energy Community Foundation grants, etc.), if needed.

Estimated Costs

The Energy Subcommittee estimates (source?) that an energy audit conducted by an outside company would cost \$20,000 to \$30,000. It is possible that we may be able to partner with the Smart Energy Design Assistance Center (SEDAC), administered by the UIUC School of Architecture, to conduct a portion/all of the energy audit; this would defray some of that cost. With the funds leftover from the actual audit, the Energy Subcommittee would work with Illini Union staff to select cost-effective energy conservation measures to implement.

Energy Audit

The Energy Subcommittee will work with the Illini Union to select a qualified organization/professional(s) to conduct the energy audit. We will consider using the SEDAC staff and/or a third-party consultant. The audit will be completed as quickly and efficiently as possible so as to as little disruption as possible to the Union's usual operating routine. The main components of the audit are likely to include:

- HVAC system(s)
- Windows
- Chilled water supply
- Lighting
- Alternative energy sources

Implementation of Findings

Based on the findings of the audit, the Energy Subcommittee will work with Illini Union to select and implement appropriate energy conservation measures. Prior to the completion of the audit, the selection criteria will be determined, likely to be based on: potential energy savings, return on investment, operations and maintenance costs, historic and architectural implications, etc.

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2. Educate the campus on energy efficiency

Communications & Outreach

A key component of educating the UIUC campus community about energy efficiency and, in particular, this initiative will be publicity and outreach. The Energy Subcommittee will work with Illini Union staff to ensure the timing, content, and distribution of any information regarding this project are agreeable to both parties.

Faculty, Staff & Student Involvement

Throughout the entire process (before, during, and after the energy audit), the Energy Subcommittee and the Illini Union will include any interested professor(s) and student(s) to supplement research and other coursework on energy issues.

Publication of Findings

Through the use of Illini Union floor space, wall displays and/or website, the Energy Subcommittee will, at a minimum, develop a professional quality informational display that documents the energy audit and implemented energy conservation measures. In addition, the Energy Subcommittee will investigate the development and installation of an energy kiosk that will provide live and accurate updates on the Illini Union's energy use.

3. Develop recommendations to align Illini Union operations with campus sustainability strategy.

The Energy Subcommittee will work with Illini Union staff to review the lessons learned from this project to develop a strategy to make commitments toward further investment in/implementation of energy conservation measures and alignment of Illini Union operations with the developing campus sustainability strategy.

TIMELINE

December 10, 2005: Receive approval for the audit proposal approved from the Illini Union Director and Board, the Energy Sub-Committee, and the Committee for a Sustainable Campus Environment.

January 2006: Review and select the organization/professionals to conduct energy audit.

February 2006: Complete the energy audit and analyze findings.

March 2006: Review findings and determine which (if any) energy conservation measures will be implemented and when they will be completed.

April - June 2006: Begin design review of selected retrofits and schedule implementation.