

Executive Summary – Proposed Energy Investment Program Ohio Board of Regents

PROBLEM STATEMENT

Most recent Ohio Board of Regents estimates of current and deferred maintenance at Ohio's public higher education institutions range from \$4 to \$5 billion. At flat funding levels and using current replacement values of Educational and General (E&G) buildings, state capital funds only provide approximately 50% of the total capital renewal need at Ohio's campuses. Local funding does provide additional capital renewal resources. However, capacity constraints and the need to add improved auxiliary space (e.g., dormitories, student centers, and recreation centers) limit the amount of local funds institutions can dedicate to E&G capital renewal needs.

A 1989 study conducted by Miami University demonstrated that 52% of E&G building deferred maintenance was potentially related to system components that impact campus energy use. These system components include Electrical, HVAC, and Exterior Structures. If the results of the study are still valid and applicable to all campuses collectively, potentially \$2 to \$2.5 billion of estimated current and deferred maintenance projects could impact campus energy use.

It is clear that investments in energy efficiency can to be an important component of our agencies strategy to address capital renewal needs at our campuses. In order for investments in energy efficiency to be effective, the projects would need to accomplish two goals – 1) decrease long-term campus energy use; and 2) address campus capital renewal needs.

Due to campus debt constraints, there are few opportunities to use alternative financing mechanisms such as performance contracts for energy efficiency projects. Funding of energy efficiency projects through operating budgets is a viable option and is pursued to a limited extent at some of our campuses. However, state budget cuts and tuition caps have significantly reduced or eliminated sources of potential funds.

PROPOSED PROGRAM

Our agency proposes a partnership with the ODOD Office of Energy Efficiency (OEE) Revolving Loan Program to establish internal revolving funds at Ohio's public campuses. OEE would provide seed funds to public colleges and universities that would establish a revolving operating fund at each institution. The revolving fund would finance energy efficiency projects such as upgrades to lighting, heating, cooling and ventilation systems, and envelope upgrades. Due to campus debt constraints, the funding arrangement would need to be structured so that an obligation is not created. However, it may be necessary to include a provision that allows for campus repayment of funds granted by OEE.

This proposed program would be attractive to our campuses for a variety of reasons –

1. The repayment stream is already in place in the form of internal budgets.
2. Energy projects funded would not compete with limited capital funds.
3. A key outcome would be a reduction in maintenance and operating costs as facilities are modernized.
4. The funds would be internal to the institution, so there is inherent flexibility to address changing conditions.

One example of the potential for this concept is the experience at the University of Michigan. The institution has made a long-term commitment to bring all campus buildings to Energy Star® standards by 2005. As of 2003, a total of 56 out of 112 buildings met the criteria.

In 1997, the University of Michigan staked its internal revolving fund for energy efficiency projects by allocating \$2 million of unallocated energy budget funds. Between 1997 and 2003, the university invested a total of \$12 million in energy projects.

By 1999, over \$600,000 in savings were realized from energy efficiency projects. By 2002, a savings of \$6.7 million a year was documented. The projected savings is \$9.7 million a year upon full implementation of all Energy Star® projects. Along with financial savings, 590 billion Btu's of electricity and fuel has been saved through 2002 as a result of the efficiency projects.