Energy Task Force
FY12 Report

Energy Efficiency Fund

Savings carryover from previously installed projects along with new projects installed during FY12 saved over $250,000. Projections forecast the FY13 savings to top the $300,000 level. New projects this year were highlighted with the University’s first Retro-Commissioning project at Gregg Hall. Installation is expected to be completed this summer and will yield great energy savings while increasing overall comfort and performance of the building. The ETF wishes to further this program into FY13’s project listings due to the overwhelming success of this first project. UNH was also recognized for its leadership with the fund by being named a “Founding Circle” member of the Sustainable Endowment Institutes Billion Dollar Challenge program. ETF representatives participated in three seminar/webinars as presenters discussing the UNH EEF.

Heating and Cooling Guidelines

A proposed set of guidelines was developed to clearly define the intended operations of buildings on campus as related to heating and cooling spaces. The document will serve as a reference for thermostat controls in both standalone buildings and those maintained by the central Building Automation System. The targeted values for heating and cooling will provide both defined expectations as well as economic savings. The guidelines have been endorsed by the ETF and accepted by the AVP Energy and Campus Development as the operating guidelines for campus heating and cooling systems. The guidelines will also be listed with the UNH construction and renovation standards to ensure new spaces begin their service with the proper temperature set points.
Sustainability Stewards

From beginning the program last year, the Sustainability Stewards have succeeded as being the building representatives of the Energy Task Force. While being informed of the issues taking place on campus, the Stewards took it upon themselves to work on their own project in FY12. The Commuter Challenge, which took place in May, was completely organized and managed within the Stewards group, informing and educating the entire campus of the benefits of using alternative transportation on campus.

Transportation Management Enhancements

The ETF has supported the Transportation Policy Committee’s recommendations and subsequent implementation of new policies and practices to improve campus mobility and reduce parking and private vehicle commuting. Examples include modifications to parking permit strategies; expanded transit frequency, funding for new transit vehicles, pedestrian and bike infrastructure improvements, Transit Center improvements, redesigned streetscapes and collaborations with Amtrak, ZipCar and intercity bus providers such as C&J. UNH was also awarded over $3M of transit funding which will become available in FY12-16. In addition, the ETF has supported grant initiatives to expand CNG fleet and infrastructure and continue the transition of all UNH diesel fleet to low sulfur B20 (to date approximately 87% transition). In FY 11, these alternative fuel initiatives resulted in over 20,000 gge of CNG and 85,000 gals of B20 utilization with an estimated aggregate reduction of 37,000 gals of gas/petrodiesel representing savings of $40,000 and 104 tons CO2 reduction.

Anticipated FY13 Activity

The Energy Task Force has identified actions that will require a broader base of University-wide support and commitment beyond what Task Force members can accomplish with their existing resources. In these areas, the ETF may need the support of the President and Cabinet in
order to effectively proceed.

**Establish Clean Fleet Advisor**

In FY 2012, UNH is projected to spend over $675,000 on fleet fuel representing just under a quarter million gallon equivalents and travel of just over 1.4 million vehicle miles (of which just under 40% is transit). With the completion of the fast-fill CNG fuel station in July 2011, UNH can move more aggressively with transition to natural gas fueled vehicles (natural gas cost is currently $1.75/gas gallon equivalent). Additionally, UNH can net short-term as well as life cycle cost savings by rededication to its comprehensive Clean Fleet and Eco-Cat programs. However, under the current decentralized vehicle management, there is no coordination of vehicle purchases, and no mechanism to influence the type of vehicles being purchased or the type of fuel they will use. The ETF has developed a proposal to assign a Clean Fleet Advisor to serve as a resource on issues related to vehicle fleet management, infrastructure and utilization. This proposal is attached for consideration, feedback or endorsement. The AVP Facilities is prepared to assign these responsibilities as additional duties to an existing staff position.

**Building Management Policy Changes**

Space assignment decisions need to give greater weight to energy implications. There is potential to maximize heating/cooling by consolidating activity in fewer buildings during times of lower utilization (e.g., summer). For example, summer housing could be contained in buildings cooled by the cogeneration plant to avoid using costly electric air conditioning or cooling an underutilized building. These changes could achieve projected savings of as much as ~$120,000 and 400 t CO2e annually. The ETF will work with campus units responsible for building use decisions to make energy use a greater factor in their decision-making.

**Increased Campus-wide Communication Efforts**
All of the operating units connected to the Energy Task Force invest significant resources in outreach to the community. Ongoing, university-sponsored engagement is critical for obtaining the energy, cost, and emissions savings and reinforcing these cultural norms. A successful communication strategy will include ongoing consistent messages across all student and operations departments. Making further progress toward the ACUPCC goals will depend on many small initiatives and changing individual behavior (e.g. accepting lower levels of heating and cooling.) In AY 12-13 the ETF will continue to work on the formulation of consistent, campus-wide messaging around energy efficiency and sustainability as core principles. With leadership support this can impact campus culture and influence individual behavior.

**Continued Support for Efficiency Fund**

In order to achieve full benefit from the energy efficiency fund, savings must continue to be captured and reinvested despite current budget pressure. In FY13, the Facilities budget continues to support EEF funding. A sustained level of capital investment by the fund will allow for the completion of deeper energy savings through projects with longer paybacks.

**Sustainability Stewards Program**

Despite having a core group of motivated participants, the Sustainability Stewards represent an inadequate portion of the campus population. Establishing a structured way to insure a two-way flow of information has been identified as a key objective for FY13.