Status Report of the Ad Hoc Committee on Sustainability

The committee met for the first time on February 11, 2001 at which time it received the charge from Ernest May, Secretary of the Faculty Senate. Six subcommittees were established: Steering, Operations and Costs Savings, New Construction and Renovation, Research, Public Service, and External Funding, Academics and Curriculum, and Student Involvement. Each of the subcommittees has begun work on three tasks: to assess activities currently on-going on the Amherst campus, to evaluate the range of programs on other campuses, and to develop a set of recommendations for future actions.

The committee is also participating in the system-wide initiative that is being spearheaded by Walter Bickford on the University of Massachusetts, Boston campus. This effort is supported by the Urban Harbors Institute, the Massachusetts Executive Office of Environmental Affairs, and the New England Region of the U.S. Environmental Protection Agency. The first system-wide workshop will be held May 16th at the Westborough facilities.

The committee of the whole has met three times in addition to numerous subcommittee meetings. A strong consensus is developing that, in the context of a university, sustainability is about using resources most efficiently to meet the mission of the university. To this end, an impressive number of projects have been identified as already in progress at the University of Massachusetts, Amherst. These projects are outlined briefly below.

- All 36 Physical Plant diesel-powered vehicles have been switched from diesel to biodiesel made from vegetable oil. The supplier is a Massachusetts-based company, World Energy Alternatives of Chelsea.
- The University has applied to participate in an EPA sponsored Environmental Management Systems pilot program. This program is intended to measure the environmental impact of the University and to avoid penalties and fines.
- The University’s Alternative Fuel Vehicle fleet now numbers thirty, including twenty Geo Solectria Metros donated by the Massachusetts Division of Energy Resources.
- A new central heating plant is currently in the design phase. The plant will take advantage of the energy saving potential of cogeneration. Funds are currently being sought to conduct a feasibility study to incorporate further green building and renewable energy features.
- A proposal for the development of a sustainability curriculum has been prepared through the collaborative efforts of students, faculty and community members.
- The University of Massachusetts, Amherst has built a waste reduction program that is a model for campuses nationwide. Specific programs developed by the Office of Waste Management include the Green Office Initiative and the Residence Hall Waste Reduction Initiative. These efforts have achieved a 53% recycling rate and generated revenues of $165,000.
Environmental Heath and Safety sponsors the Chemical Reuse and Exchange Program which targets the 28% of the hazardous wastes stream that consists of virgin chemicals.

Students for Sustainability (a registered student organization) organized a well attended conference May 3-5 that featured several outstanding speakers on topics of sustainability.

The Steam Recovery Initiative has resulted in an increase in efficiency from 30% to 60% for an annual savings of $600,000.

The UMass Transit switched to low sulfur fuel for all of its buses. The cost of the fuel is kept low by purchasing futures contracts every year.

The Transit Department partners with PVTA, local communities, and business neighbors to encourage reduction in Single Occupancy Vehicles through the Transportation Management Association and Department of Environmental Protections’ Commuter Program.

The Physical Plant Grounds Management Department has sponsored a sustainable operations workshop series for operations managers from the UMass system and Five Colleges.

Exploratory initiatives are also underway in several areas. One such effort is attempting to secure funding to recycle the Wastewater Treatment Plant effluent using phytoremediation and to use this effluent to provide the sixty-six million gallons of water required annually for the University’s power plant. The University is also working with the Division of Capital Asset Management to establish a Performance Contract with an energy service company. The approach is for a third party to make capital investments in energy savings equipment such efficient lighting and chillers. The investment is paid back over a ten-year period from the savings in utility costs. The request for proposals is prepared for release in the near future.

The goal is to be prepared to make a series of recommendations to the Faculty Senate in the fall of 2002. The work of the committee has benefited greatly from the efforts of numerous faculty and students as well as representatives of Environmental Health and Safety, Facilities Planning and Development, Physical Plant, Campus Master Planning, and Procurement.

MOVED: That the Faculty Senate endorse the Status Report of the Ad Hoc Committee on Sustainability, as presented in Sen. Doc. No. 02-044.

Submitted May 9, 2001
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Chair, Ad Hoc Committee on Sustainability