Advisory Committee –
American College & University Presidents Climate Commitment

Year Three Report, AY 2009/2010

The Advisory Committee is appointed on an ad hoc basis by President Roush to lead the College’s participation in the American College and University Presidents Climate Commitment and to advise the President on issues relating to sustainability and energy and resource conservation. This year we expanded the committee to include representatives from our alumni (Claude Stephens) and the local community (Terry Crowley). Committee members from campus included: Mike Fabritius, Michael Hamm, Laura Hanson,’11 (fall), Steve Jamison, Elizabeth MacNabb, Scott Messer, Preston Miles (chair), Patrick Noltemeyer, Endre Nyerges, Bethany Pratt, ’10, Elizabeth Perkins, Sami Sweis,’10 (spring), Brett Werner). We met eight times through the year (Sept 17, Oct 1, Oct 27, Nov 24, Jan 12, Feb 23, Mar 30, Apr 17, and May 11) and enjoyed consistent attendance and high enthusiasm. Notes were prepared from each meeting and are available electronically http://web.centre.edu/presidentsclimatecommitment/ A summary of activities of the committee is presented below.

Campus and Community Awareness

One of the greatest challenges we face is informing our campus stakeholders about the Presidents Climate Commitment, sustainability issues in general, and the work that Centre is doing to reduce environmental impact.

This year, we have had articles in the Cento and web stories on the campus website (Nov 12, Dec 13, Feb 11, Feb 18, Apr 15, May 13).

Centre was recognized by the Environmental Protection Agency as a Green Power Partner for purchase of renewable energy certificates sourced at the Mother Ann Lee hydrostation. On Nov. 10, E.ON., the parent company of Kentucky Utilities and Louisville Gas & Electric, presented Centre and its students with the company's favorite non-residential customer award for students' efforts with the Mother Ann Lee Hydroelectric Station.

Tony Cortese, President of Second Nature, was our Woodrow Wilson speaker in February. He also met with leaders on campus and with our PCC committee.

The PCC committee and ECCO presented informational displays at the community Earth Day celebration on April 24.

We have made presentations discussing the Climate Action Plan and the college’s efforts toward sustainability to: our in-house management seminar, May 27; the Faculty Friday Hour series, Feb 19; senior staff, Mar 2; Planning & Priorities committee, Mar 9; the Louisville alumni group, Mar 23; and Danville city commission, Apr 26.

Abby Malik has begun development of a sustainability website. This will be a much higher impact way for us to communicate not only on-campus, but with alumni, local community and prospective students. The public is now so accustomed to web-page information sources, that we will be able to reach a much wider audience. The “down-side” of a web page, is the continuing effort that will be needed to keep the web-site updated and fresh.
Rating/Ranking Systems

Participation in surveys about sustainability allows us to stay involved in the national picture and be aware of new issues of importance to the public. But like the surveys of academic reputation, these surveys sometimes focus on the easily quantifiable aspects of sustainability and miss the more fundamental issues. This year we participated in Sierra Club Magazine, Princeton Review, Sustainable Endowments Institute, and Peterson’s Survey of Sustainability Efforts in Higher Education.

We were not pleased by the “C” result from Sustainable Endowments Institute. The component scores were: administration, A; climate/energy, C; food/recycling, C; green building, A; student involvement, C; transportation, D; endowment transparency, D; investment priorities, D; shareholder engagement, F. We have decided to participate continue participation for 2010 and pay greater attention to how we phrase our responses.

We were pleased to be included in the Princeton Review’s Guide to 286 Green Colleges. Our “green rating” was 81. This compares with Berea, 89; Transy, 60; Furman, 97; Sewanee, 88; Rhodes, 82; Davidson, 60; Kenyon, 77, UK, 60. Here again, details of how we respond to survey questions appear to have a great impact on scores.

The Association for Advancement of Sustainability in Higher Education (AASHE) has produced the Sustainability Tracking, Assessment and Rating System (STARS) as a self-reporting framework for colleges and universities to gauge relative progress toward sustainability. The intention of AASHE is this program will be more comprehensive (area evaluated are education & research, operations, planning, administration & engagement, and innovation) and allow meaningful comparisons over time and across institutions using a common set of measurements developed with broad participation. The hope is that STARS eventually will displace the multitude of less comprehensive surveys. Our committee considered participation but the resources required (both dollars and time) outweigh the benefits to Centre at this point.

The Clean Air/Cool Planet organization has developed an auditing system for dining hall operations called CHEFS. That program is now in beta-test stage and we can re-investigate this in the future.

Recycling

Our recycling efforts continues to be a strength for us. As of April we had collected 43 tons relative to 36 tons at the same point last year. We are on track to exceed this year’s goal of 65 tons. Included in this total is the 8 tons of old computers and other electronic gear that was recycled by an approved e-waste hauler.

We participated in RecycleMania this year, after not participating in 2009. For the six week competition period in Feb-Mar we collected 13.7 pounds per person. This ranked Centre first among 5 colleges and universities in Kentucky and 114th of 346 institutions nationwide. The promotional efforts of ECCO and Facilities Management were important for this success.

Cheryl Coulter made presentation about the value of recycling in the Campus Center on Earth Day.

The “dumpster diving” sponsored by ECCO (described below) also raised awareness of how much more material we could be recycling.
Campus Facilities

In light of the contribution that our buildings make to the overall College GHG emissions, attention to our built environment is an important focus. The visibility of energy efficiency aspects of Pearl Hall continues to be a rallying point for campus awareness of sustainability issues. The LEED gold certification received by this building is an external validation of the important features and a high-impact way of communication to the public.

The new Campus Center was dedicated in spring 2010 and that facility has been submitted to the U.S. Green Building Council for consideration under the LEED criteria. At this point, we have no response from USGBC, but our architects suggest that silver certification is possible. We expect completion of the Young Hall expansion/renovation in fall 2010 and submission to USGBC is anticipated for that building.

In fall 2009, a major renovation of the Norton Center was completed. Among the many changes were new HVAC system, zoning of HVAC, thermopane windows, and more efficient hot water system. Our Facilities Management department hired Heapy Engineering to determine if the Norton Center project could be certified through the LEED-Existing Building category. Heapy reported that at least 52 points were available that would lead to likely certification at the silver level. Though we subsequently decided not to pursue the expensive ($75,000) for formal certification, this information affirms for us the value of the energy efficiency aspects of the remodeling.

The attention to energy conservation carries over to our smaller internally-funded projects. During summer 2010 our Facilities Management department will lead three major renovations. The third floor of Wiseman Hall will be “finished out” as housing for fourteen students. This projects is an example of how re-use of existing buildings can be more sustainable than even the most efficient new construction. In Nevin Hall, new thermopane windows and all new fan-coil units will be installed. The increased insulation of the windows and greater efficiency of the fan-coil units will lead to significant energy savings and increased occupant comfort. In Carnegie Hall, a new forced-air heat pump system has been installed. This replaces a 45+ year old boiler, a recycled chiller, and inefficient fan-coil units. Improvements in reliability, comfort, and efficiency are anticipated.

As we work toward better public communication, one thing we will want to emphasize is the advances in building operational efficiency that have been made in recent years. The Facilities Management “green list” might be the basis for part of a web page.

Climate Action Plan

We completed our responsibilities under the ACUPCC by issuing our Climate Action Plan in mid-December. The significant aspect of the plan is establishing our institutional goal to reduce our GHG emissions by 25% by 2020, by 50% by 2030, and to achieve climate neutrality by 2040.

Infrastructure Development

Scott Messer and student assistants have completed the implementation of SchoolDude software. Every month now, Scott obtains utility bills from the Finance Department and Dawn Bailey enters that information into the SchoolDude data base.

The 2009 GHG inventory has not yet been completed. Now that SchoolDude database is fully functional, we hope to complete that work in June. Since there have been changes in the Clean Air/Cool Planet spreadsheet, we also plan to re-work the 2008 inventory with the newest
version. The ACUPCC actually only requires that GHG inventory be conducted every other year. In light of the new construction on our campus, we have decided to do this survey annually at least for the next three of four years. We may choose to go to alternate years in the future.

In order to make accomplish the goals set out in our Climate Action Plan we must make concrete plans for the building efficiency improvements that will be necessary. If our goal of achieving a 25% reduction in GHG emissions by 2020 is to be meaningful, we must identify the engineering retrofits and cost estimates to achieve that goal. We have received an offer from 8760 Engineering for “Building Phase I Energy Studies and Initial Steps to the Development of a Comprehensive Campus Energy Plan”. These services will include identifying energy conservation measures and project cost opinions for about 20% of our building space. 8760 Engineering has offered these services for $37,500, a 50% reduction to the firm’s customary fee structure.

We are developing a survey instrument that we hope to administer to staff and students in fall 2010. This will assess the level of understanding that individuals have of environmental and sustainability issues and also their attitude toward those issues. We will use the insights from the survey to guide our future work, especially public information efforts.

Student Activities

The enthusiasm of our students continues to be a major driving force for all campus progress. This year ECCO organized several events beginning with a presentation on mountain-top removal mining by Dave Cooper (Sierra Club of Kentucky) in October. Bethany Pratt presented a campus-wide convocation on stream water quality in November.

Cheryl Coulter and several students conducted a campus waste stream audit March 18. This showed that over a third of waste could have been recycled. This was featured on the campus website March 25. [http://www.centre.edu/photo_essay/2010/dumpsterdive/index.html](http://www.centre.edu/photo_essay/2010/dumpsterdive/index.html)

Lee Myers-White assessed the amount of electricity that is wasted by electronic devices on “standby” and found that as much as 1% of our campus electricity use could be eliminated by best conservation practices. His work was reported to our Information Technology department and at the Campus Community Partnership for Sustainability conference.


The most dramatic achievement this year has been the formation of a student organization for a campus garden. Garden Research through Organic Ways of Sustainability (GROWS) has received recognition and funding through the Student Government Association. The garden was planted in May and has flourished through the spring. The PCC committee is very supportive of the good work of these students.

External Funding

We have participated in two unsuccessful proposals for renewable energy demonstration projects. The first was a collaboration with University of Kentucky, Inter-County Energy Cooperative and East Kentucky Power Cooperative proposal to the U.S. Dept. of Energy National Energy Technology Laboratory Recovery Act-Smart Grid Demonstrations. The second was a collaborative proposal with East Kentucky Power Cooperative to the Kentucky Energy and Environment Cabinet. In both proposals the Centre involvement was installation of small photoelectric systems and/or residential-size wind turbine.
We made preliminary approaches to the Arthur Vining Davis Foundation and the UPS Foundation. These were of the “letter of inquiry” type and described capital projects and new programming initiatives. Neither was successful.

Green Events
Our new student orientation program was conducted as a “green” event, with paper handouts replaced by a thumb drive and tee-shirts of recycled materials. Laura Hansen developed a slide show used before the all-student meetings that communicated campus sustainability programs.

We investigated “green” graduation gowns and decided the extra cost was not appropriate. Graduation this spring used water carboys and avoided bottled water at some of the venues.

With the change in dining facilities we lost the progress toward re-useable take out containers. This will be important to pursue in the coming year. Our dining hall operations are highly visible among students and steps taken in this area to reduce waste can have a great influence on conservation habits.

CMGSAT
In November 2009, the International Programs Committee adopted a policy to assess a charge to mitigate the environmental impact of air travel associated with our international academic programs, both long terms and Centre term. The intention of the committee is this program will be educational in two senses: the students will see the direct link between their air travel and the production (and offsetting) of a specific amount of CO$_2$, and they will be able to identify a particular green project on campus their offset dollars have supported. Our group endorsed this program and assisted in computing appropriate offset charges ($10 to $40, depending upon distance).

The program was announced in March 2010. There was significant concern among students, communicated primarily through Facebook groups and an open forum held in mid-April. The students’ concerns arise primarily from the perceived “surprise” of an additional fee, an incomplete understanding of environmental impact of air travel, and general lack of awareness of the sustainability efforts across campus. As response to the students’ concerns, the assessment was made voluntary for off-campus study programs fall term 2010. As discussed earlier, we must make greater efforts to communicate the Presidents Climate Commitment to everyone on campus, describe valuable steps the College is taking, and explaining opportunities we have to advance sustainability. A campus forum in the fall is planned.

Academic Integration
Incorporation of sustainability into the curriculum is one of our goals through the ACUPCC. Our judgment in the Climate Action Plan was that we “meet this requirement satisfactorily at present.” This spring, our committee discussed how we might build and extend sustainability more widely into the curriculum. The revised HHP program was suggested as an opportunity.

Centre was fortunate this year to have Brett Werner join our faculty through the Associated Colleges of the South Environmental Post-Doc Fellows program. Brett was able to add two new courses to our offerings.

This area deserves greater attention in AY 10/11.