

## **Working Group on Sustainability, End of year report, 2011-2012**

### **Committee composition for this year:**

Faculty: Philip Camill (Chair), Paul E. Schaffner, Susan E. Wegner

Staff: Barry Mills, President; S. Catherine Longley, Senior Vice President for Finance and Administration & Treasurer; Keisha Payson, Coordinator for a Sustainable Bowdoin; Eileen Johnson, ES Program Manager; Sarah Paul, Career Advisor; Ben Farrell, Associate Director of Residential Education

is the liaison to the student group, Green Bowdoin Alliance.

### **Major goals:**

Goal as part of the Bowdoin Climate Action Plan: Evaluate possibilities for achieving 5% of the overall greenhouse gas emissions reductions through behavioral change/energy conservation (5% = 1.3 million lbs. CO<sub>2</sub>e)

Discuss whether community wide energy conservation on campus should focus on individual-based action items or building-based energy conservation approaches

Evaluate the effectiveness of building energy competitions for meeting this carbon reduction goal

Develop a strategy for campus education

Define next steps that can infuse campus life and be sustained after the WGS dissolves

### **Summary of principal accomplishments:**

Discussed potential dates and ways to engage the campus community (including new members and first-year students) with information about the carbon neutrality initiative  
President Mills issued a message to the campus with an update about the carbon neutrality activities and accomplishments to date (Fall 2011)

Discussions on individual-based approaches: This strategy would include providing faculty, staff, and students with a list of specific action items that could help individuals contribute to energy reductions across campus. One possible campaign slogan was 500 pounds of CO<sub>2</sub>, but this theme was abandoned because of the potential sensitivity of the message regarding issues of eating disorders and self image. After much discussion over several meetings, including consultations with other institutions who have implemented such a plan (Carnegie Mellon University), the WGS confirmed that the individual-based approach (asking individuals to make specific pledges to action items and then attempting to account for these changes) would be too difficult. CMU and many other schools are moving more towards the whole-building approach like the Lucid Dashboard system that Bowdoin has in place.

Discussions on building-based approaches: This approach would focus on whether energy competitions with the ~40 buildings on the Dashboard system would allow Bowdoin to meet the 5% reduction that is part of the behavioral contribution to the Climate Action Plan.

Evaluation of the efficacy of the building approach was accomplished following two energy competitions. The October 2011 dorm energy competition reduced emissions campus-wide by 20,000 lbs. CO<sub>2</sub>e, or only 1.5% of this 5% reduction target. Extending

the competition to 9 months and including academic buildings would likely increase reductions to 10-14% of the overall 5% reduction target. The February-March 2012 energy competition achieved a similar outcome. Net campus-wide reduction of approximately 13,000 lbs CO<sub>2</sub>e. Given that the behavioral change part of the climate action plan was 5% of the overall emissions reduction, this means one month of energy savings accounts for only 1% of the 5% target. If the competition were extended to 9 months this would still be less than 10% of the behavioral conservation target, and there are diminishing returns each year as buildings improve in energy savings, so these reductions over the long term are likely not achievable.

We therefore conclude that the overall 5% carbon emission reduction target is too ambitious based on the kinds of metrics (whole building energy use) that are currently available at Bowdoin for energy reduction accounting. However, we reaffirm the educational benefits of greenhouse emission/energy reductions and wish to continue promoting individual actions and curricular opportunities for addressing C neutrality and sustainability.

Successful co-curricular events to raise awareness of sustainability and carbon neutrality during academic year 2011-2012 included: (1) week-long pilot program by the student group Green Bowdoin Alliance to turn out campus lights, (2) Feb 10 Common Hour by Auden Schendler, (3) improvement of the Bowdoin sustainability website to focus on action items that students can do now, (4) engagement with social houses to educate about sustainability and carbon neutrality, (5) active engagement across campus by dorm and office eco-reps, (6) creation of athletic teams engage sustainability and carbon neutrality, (7) development of a footprint graphic by Communications for visualizing the annual C emission reductions (to be used as banners, posters, and on the web), (8) positive benefits of the energy competitions (good public engagement, net energy reduction campus-wide, students appreciated the reminder about energy savings and carbon neutrality after winter break), (9) listing of Bowdoin courses related to sustainability and carbon neutrality with the AASHE STARS program

Develop a set of critical messages that highlight the fundamental commitments of the College.

Develop stronger links of C neutrality and sustainability with the BOC, especially Pre-O mentoring.

Implement a brief education program about C neutrality at Bowdoin for first-year students to be coordinated between Res Life and dorm proctors.

Develop a protocol for discussing C neutrality for everyone involved with student -reps).

Consider developing art installations around campus as a means of public education about sustainability, in general, and C neutrality, in particular.