

To: President Bultman
From: Steven Bouma-Prediger & Greg Maybury, co-chairs
Date: April 22, 2009
Re: Campus Sustainability Task Force (CSTF) Final Report

The CSTF has been meeting since March 13 of last year (with a break in schedule during the summer) and we would like to present you with this final report. In response to each of the charges you presented to the task force, we have taken the following actions:

- *Do a comprehensive environmental audit of the campus.*
The task force contacted physical plant directors in the MiAPPA organization (physical plant groups), the GLCA, and colleagues at other schools to help identify potential audit firms. We found that this is a very new field and there are few groups available that provide this level of audit for a college campus. The task force decided to prepare an RFP for an energy/environmental audit and send it to local engineering groups that have some experience in conducting similar studies. After reviewing the responses to our RFP, we engaged GMB Architects/Engineers to perform an energy audit on our three most energy intensive buildings (DeVos Fieldhouse, Dow Center, Schaap Science Center) and to suggest appropriate methodologies to reduce our energy usage in each building. As we document the financial result of these suggestions, we would encourage the college to continue this energy audit process of selecting two or three major buildings each year. Operational savings could fund the cost of these energy audits.
- *Investigate and implement additional measures to make Hope a more sustainable campus.* Several task force members traveled to Kenyon College last fall to observe their new dining facility, composting project, and biodiesel initiative. As a result of this visit, the task force has supported several new initiatives and projects on campus. One such project is a Hope College Engineering Department student project involving the planning for and construction of a small biodiesel plant that would use waste vegetable oil

- from our dining operation and convert it to biodiesel that could be used in our grounds vehicles and student Shuttle Bus. Another recent initiative is "Trayless Tuesdays" in our campus dining facilities that is designed to minimize the amount of food waste and to decrease the amount of water required to wash trays. The task force has begun a dry cell battery recycling program on campus and is encouraging the expansion of current recycling efforts to include more convenient containers for plastics, metals, and paper products. We also have started an end-of-the-academic-year recycling program. We have experimented with a student led "No Drive Tuesdays" program that encourages walking, car pooling, or bicycling to work or class. While hard to document participation, it does bring a level of awareness to the campus in calling for a decrease in the use of automobiles by our students and staff. Also, plans are well underway for Hope's first environmental housing option--a "green" theme cottage with six women--in the fall semester. Finally, we have initiated a survey of innovative "best practices" that have worked on other campuses.
- *Monitor progress and cost effectiveness.* Physical Plant is working with several vendors on systems for monitoring campus energy conservation efforts and tracking the results. Various metering devices are being considered for our major buildings to track electrical and steam (natural gas) usage. Portable meters will be available for cottage residents to use in evaluating the energy consumption of individual devices in their living spaces. The Dining Services Department is monitoring the financial impact of the trayless Tuesday experiment at Phelps Hall. As of the end of February, the reaction of students to this concept is favorable as is the impact on food waste and cost containment.
 - *Explore ways to make stewardship of the environment a more prominent part of the college educational experience for all of our students.* The task force has been instrumental in scheduling campus visits by Allen Doyle and Harry Gray this spring. Allen Doyle gave a seminar on reducing the college's carbon footprint and making both teaching and research labs more energy efficient and less wasteful. Allen also met with several groups (staff and students) to speak

more specifically on “green” laboratories and “green” science in general. Harry Gray presented a seminar on solar energy on April 2nd in addition to a Chemistry seminar the following day. The evening lecture on solar energy was very well attended by members of the Hope and Holland communities and some members of the audience stayed after the talk for nearly an hour asking Dr. Gray questions. The task force and the Department of Economics is working with the Holland Board of Public Works to cosponsor John Baden - founder and chairman of the Foundation for Research on Economics and the Environment – as an Earth Day speaker the last week of April. One of the goals of the Dining Services department has been to incorporate learning about environmental stewardship into the daily experience of campus life. This has been accomplished by providing opportunities to participate in the Trayless Tuesday initiative and on any other day the student elects to dine without a tray. By giving students feedback on the food waste per student on the previous day, an awareness of wise stewardship is created. Professor Mark Pearson of the Mathematics department is collaborating with Dining Services and campus operations to create opportunities for his statistics students to collect and analyze statistical data related to Trayless Tuesdays, the shuttle bus and other sustainability efforts on campus as part of their independent research projects. These are a few of the practical ways an ethos of environmental stewardship is being encouraged on campus. Not to be forgotten are the Environmental Science and the Environmental Studies minors that have been part of the curriculum since 1998 and 2004, respectively.

- *Establish effective communications systems with the campus and community on environmental issues.* The task force has created a web site <http://green.hope.edu> and logo dedicated to environmental stewardship. This web site identifies current efforts at the college and provides links to related information at other colleges, universities, and organizations. The task force, in conjunction with Student Development, plans on incorporating environmental awareness as part of the freshmen orientation process this next fall. Professors K. Greg Murray and Steven Bouma-Prediger have given campus presentations on

environmental issues (Dr. Murray – Winter Happenings: Calculating Your Carbon Footprint and Dr. Bouma-Prediger – Chapel Presentation on Protecting Our Environment). Next year's Critical Issues Symposium "At Water's Edge" on the importance of water and the issues we face (water's scarcity, pollution, and distribution) will provide another venue for educating our campus community on the need for environmental stewardship. The Dining Services department has added a list of green initiatives to their web site and provided links to the Creative Dining Services corporate web site which features their sustainability program referred to as GROW.

- *Establish relationships with off campus organizations pursuing like or complementary goals.* The task force enrolled the college as a member of the Association for the Advancement of Sustainability in Higher Education (AASHE) which acts as a conduit for information sharing among colleges, universities, and organizations relating to environmental initiatives. Karen Nordell Pearson met with a group of ten faculty and administrators from GVSU, Cornerstone, Aquinas and Calvin at Calvin College in early December 2008. This meeting discussed sustainability issues on the respective campuses and will hopefully lead to ongoing discussions (once a semester - rotating locations) between these institutions. Several task force members are currently associated with local, regional, and national groups promoting environmental issues (e.g. Holland WEST, West Michigan Environmental Action Council, West Michigan Strategic Alliance, US Green Building Council). Our Dining Services department belongs to the National Association of College and University Food Services (NACUFS) and has attended several seminars and work shops on sustainability. Professor Steven Bouma-Prediger and Greg Maybury have given presentations on environmental sustainability for a community luncheon series in January at the Herrick Library and were part of the Energy Week program March 14 - 21. In February, Greg Maybury participated in an Eco-Charrette sponsored by the Holland Board of Public Works in conjunction with visiting speaker Jerry Yudelson (Holland Chamber presentation on *The Business Case for Green Development*). Greg Maybury

- presented an update on Hope College's environmental sustainability strategies during a HASP luncheon on March 24. These presentations are providing an opportunity for the college to engage more fully with community organizations on environmental issues. We see this community interaction as an ongoing process.
- *Propose a structure, if appropriate, to ensure ongoing progress on campus sustainability.* The task force sees a permanent structure supporting campus environmental sustainability as a critical component for the college. To this end, a champion needs to be identified to lead this effort. Ideally, a full-time staff position (Chief Sustainability Officer) should be allocated to coordinate, initiate, and support campus wide sustainability activities. An advisory committee should be identified to provide input to the CSO and to represent the various constituencies of the college. This advisory committee could be part of the campus governance structure or work independently with the CSO. The CSO should have the latitude to form ad-hoc subcommittees within this advisory committee to focus on specific action items as needed. In light of the current economic situation, the task force realizes that the creation of a new full-time position is not likely. As a short term solution, a current staff member should be identified to take on the CSO responsibilities as part of his or her assignment. This staff person should be given sufficient authority and adequate budget to continue the work of this task force's recommendations and current activities.
 - *Submit a report to the President by calendar year end.* The task force members are privileged to present this summary of our work to you. We are excited about the potential of increased environmental stewardship by all areas within our campus community and look with pride on what the college has already accomplished through its natural culture of proper resource management. This report has additional information on each point in the following pages. We have also included an appendix with a record of our meeting minutes, email conversations, and recommended actions for the future.

Respectfully submitted:

Isolde Anderson, Communication
Steve Bouma-Prediger, Religion
Kate Davelaar, Campus Ministries
Silvia Diffenderfer, Environmental Issues Group
Moses Lee, Dean of Natural and Applied Sciences
John Lunn, Economics
Mark Mares, Student Congress
Greg Maybury, Director of Operations
Mike Misovich, Engineering
Shauna Morin, Student Development
K. Greg Murray, Biology
Karen Nordell Pearson, Chemistry
Jerry Rademaker, Director of Physical Plant
Bob Van Heukelom, Director of Dining Services



***Working together for a sustainable campus and
community***

Vision Statement

- We are striving to meet our present and future needs while minimizing our negative impacts on the ecosystems upon which all life depends.
- In our academic courses, student life programs, campus ministry activities, food services, building and grounds policies, and business operations we seek to be responsible stewards of the earth entrusted to us by God.
- Called to be global citizens, we will engage the world constructively through our teaching, research, and community service in order to shape Hope College into a model of sustainability.