

# Sustainability Summit

## May 26, 2011

### Summary Report

## Introduction

Calvin College takes seriously the biblical mandate to be stewards of God's world. For years, Calvin has been actively involved in creation care and environmental stewardship through our teaching and research, through the Calvin Environmental Assessment Program (CEAP), through the Plaster Creek Stewards, and through various institutional practices undertaken by departments all over campus.

The first Sustainability Summit was held on May 21, 2008, and brought together people from various departments and units to focus attention on what we can do in our sphere of influence to foster greater environmental stewardship. In the year following the summit, a number of new initiatives began including a new Campus Sustainability Guide, a Green Wiki, and a new Calvin Sustainability Scorecard, to measure and track our achievements over time as a means to hold ourselves accountable.

A second summit was convened on May 29, 2009. At this summit, participants reviewed the achievements of the past year, examined on-line resources that had been developed to assist the Calvin community and brainstormed ways to reduce our energy consumption on campus to move us toward the goal of a 1% reduction in carbon emissions per year. The most important aspect of this gathering was the opportunity to review and evaluate the action plans from the past year and then develop action plans for the coming year.



The third Sustainability Summit took place May 26, 2011, in the Commons Lecture Hall. A total of 79 participants from faculty and staff focused their attention on three main tasks: reviewing lists of sustainability practices from other colleges on three websites (AASHE, Green Report Card, and Princeton Review) and selecting practices from these colleges that could possibly be implemented at Calvin, generating a list of potential projects that could be investigated by CEAP, and drafting action plans for each campus unit for 2011-2012.

## 2011 Sustainability Summit Agenda

- 9:00-9:45 a.m. Plenary Session
- 10:00-11:00 a.m. Cross-Department Work Session – Talking Across Units, Generating Ideas from Other Colleges
- 11:00-12:30 p.m. Department Work Session – Generating Action Plans In your Unit
- 12:30-2:00 p.m. General Session – Reporting Action Plans and Feedback

This Summary Report presents the results of the following three discussions:

- 1) Selected sustainability practices from other colleges that Calvin could consider
- 2) Potential projects for CEAP
- 3) Action plans for 2011-2012 for 15 units within the college

## Sustainability Practices/Ideas from Other Colleges

1. Use of renewable energy sources (solar) for on-campus service vehicles, e.g. golf carts
2. Use of digital media for content distribution (pdfs, iPads, etc.) to replace paper in some paper-intensive situations (PSC, BOT. etc.)
3. High impact, high visibility "Green Knight" campaign to promote recycling, energy conservation activities, and changed behaviors by the entire campus community.
4. Especially in the residence halls, to alleviate confusion about what/how to recycle, leverage the educational programs from the sustainability intern, etc.
5. Solar panels
6. Water bottle free campus
7. Electric/hybrid vehicles for campus safety personnel.
8. Sustainability coordinator and more student interns.
9. Food budget - more spent on organic/sustainable products.
10. Green roofs.
11. Academic programs: add a sustainability degree program.
12. Promote campus-wide energy sustainability and encourage alumni worldwide to join in specific practices scheduled on campus.
13. "Go Cold Turkey" energy competition
14. Have students turn off their computers, lights, appliances and heat before leaving campus for the Thanksgiving and Christmas holidays.

15. Add bus stops on campus to encourage more students to use the bus for transportation.



16. Add more rain gardens to campus grounds.

17. Add a small recycle bin in each campus office/area to be half way to the centrally located recycle bins so it would be easier to recycle an item than put it in the trash.

18. Add more sustainability awareness during new faculty and staff orientation.

19. Geo thermal farm.

20. Increased bike use.

21. Reduced use of printing

22. Reduce electrical usage by having a contest with another college to see which one can reduce the most.

23. Sustainability Service Learning: internships; grants; database of learning project ideas submitted by students, faculty, staff, community members.

24. Campus carpool with designated desirable spaces in parking lots, pay-to-park, free RAPID rides.

25. Increase tree coverage and naturalized areas on campus.

26. Install solar panels and green roofs.

27. Energy efficient heating/cooling/insulating in older dorms and campus buildings.
28. Composting.
29. Have a campus garden and use the produce in the dining halls.
30. Work with the city of Grand Rapids on feasibility of an urban organic waste management system.
31. Parking rates/promote carpooling/special parking.
32. Commuter locker room with large covered bike parking nearby.
33. Bike maintenance facilitation/upkeep clinics/regular schedule.
34. Campus wide electronic recycling/reuse.
35. Campus wide collection of pop cans with specific fund-raising goals.
36. Create special internal student accounts to incentivize various activities like kill-a-watt etc.
37. Develop a system whereby students pre-order food from dining halls to help eliminate waste even more - incentivize with discounts for pre-ordered food.
38. Food composting availability at all buildings for students and faculty who bring their own lunches. Also make it available from Johnny's and Spoelhof Cafe.
39. Compost paper towels.
40. More trees and less lawn to help increase tree canopy cover on campus, not in the central areas but rather more of the outlying areas of the campus.
41. Addition of porous pavement whenever new pavement is necessary.
42. Green roof on a small scale test basis.
43. Occupancy sensor and/or window contacts to not allow heating/cooling systems to run while windows are open.
44. Adjust portion sizes at the Prince Conference Center to reduce waste while still allowing for second helpings to be available to those who want it.
45. More rain gardens around campus with a specific emphasis outside Spoelhof Cafe toward the NE corner.
46. Timer on shower limits for students in the dorms.
47. Recover waste heat from boilers/co-generation system to provide snowmelt on campus in order to reduce the amount of salt needed on campus and gas consumed during snow plowing.



### Potential Projects for CEAP

1. Broadening the academic focus on sustainability – a new course, modules in existing courses, bring in experts from outside or cross-department courses.
2. More focus on our public presence (e.g. web pages) on sustainability; do a better job of telling our stories.
3. Do a better job of being a sustainability leader in our community.
4. How can we improve recycling on campus? People are not recycling enough (30%) even when we make it easy. Do a recycling evaluation demonstration.
5. Can we compost more food waste?
6. Why haven't we participated in the Green Report Card?
7. Why haven't we committed to get LEED and Energy Star certification for every new building?
8. What can be done to retrofit older buildings to make them more energy efficient?
9. Why can't we get rid of Calvin bottled water?
10. Why isn't there a paper recycle bin on the main floor of the chapel?
11. How do we measure the total cost of green initiatives? (Cost of additional labor, etc.)
12. How do we transfer Kill-a-watt ideas to faculty/staff & academic buildings? Reward the departments that make significant changes?

13. Why aren't automatic lights implemented in ALL classrooms yet?
14. How much more energy is used by the new track lighting? (for artwork, etc.?)
15. Why can't students print double-sided in the library? Why do some printers print single-side printing only?
16. Why can't we have bike racks near the bus stops to encourage bike / bussing options?
17. Can we have a program that allows us to find daily or weekly carpools for faculty, staff & students?
18. Can Calvin do single stream recycling? If not, can we do a better job of recycling multiple things in offices and dorm rooms?
19. Can students be better educated about recycling issues?
20. Research how much more efficient food service could be with students pre-ordering.
21. Assess where all our waste goes campus wide.
22. Why are not more of our buildings LEED certified?
23. How can we more effectively gather and report data on sustainability initiatives? (i.e. hazardous waste)
24. How can our initiatives and successes be better communicated and shared with campus and the community?
25. Compare the rate and volume of rain water in drains on campus with and without rain gardens.



## Action Plans by Unit for 2011-2012

### Admissions Action Plan

Group Members: Matt Sink, Dana Hebreard, Tom Van Eck

Goal	Action	How to monitor	Who is responsible	By when
<b>Develop better ways of measuring how much paper we use and how effective are various mailings to prospective students.</b>	Communication inventory. Develop Effectiveness Measures	Establish control groups to measure response of communication efforts. Invite focus groups to provide feed on current communication pieces.	Enrollment Communications and Marketing	May, 2012
<b>Monitor Travel expenditures and energy consumption.</b>	Tracking spreadsheet to evaluate travel costs vs. effectiveness of travel.	Effectiveness of recruiting efforts. ROI for recruited students.	Admissions Management	September 1, 2011
<b>Leverage current technologies to reduce printing and increase efficiencies in the areas of advising, registration, financial aid, and admissions.</b>	Review business processes to determine where current technologies can be leveraged to reduce reliance upon paper/printing.	Develop departmental action plans to track successful integration of technologies.	Enrollment Operations and Research	December 31,2011
<b>Take inventory of the degree to which we use recycled paper in print materials.</b>	Integrate within Communications inventory project as described in point 1.	Ensure vendor adherence with recycled paper initiative.		
<b>Assess whether bottled water usage could be reduced in our programming, e.g. visits and hospitality.</b>	Provide visitors with alternative options, such as glasses while within Spoelhof.			
<b>Seek ways to involve students in on-campus jobs in sustainability areas.</b>				
<b>Better publicize to prospective students the sustainability efforts happening on campus.</b>	Integrate campus sustainability efforts within enrollment communications and web presence			
<b>Explore the extent to which staff uses public transportation, bike or walk to work, or carpool, and explore ways to increase levels.</b>	Develop a shared ride calendar to be distributed throughout the Enrollment Division.			
<b>Explore the use of laptops for more staff to help reduce the use of paper and printing costs.</b>	Perform cost analysis to determine feasibility of providing laptops/smart devices for committee members within division to reduce print needs.			

## Advancement/Development Action Plan

Group Members: Bob Alderink, Tim Ellens, John Smilde, Matt Kucinski, Cindy Wolffis, Ashleigh Draft

Goal	Action	How to monitor	Who is responsible	By when
<b>Reduce paper consumption internally.</b>	Implementing imaging software for scanning and archiving and sharing records that formerly could have multiple copies.	number of copies and paper purchased	John Smilde	
<b>Reduce paper consumption externally. (development)</b>	Expand database of donor emails. Send e-communication and receipts.	track in Colleague	John Smilde	
<b>Reduce paper consumption externally. (C&amp;M)</b>	Develop and implement a design brief that better evaluates a client's communication needs.		Tim Ellens, Bob Alderink	Sept 2011
<b>Youngsma energy reduction</b>	Shut down electrical devices evenings and weekends.		Matt Kucinski	Sept. 2011
<b>Reduce travel</b>	Consolidate donor visits in geographical areas	travel log	Cindy Wolffis, regional gift officers,	June 2011
<b>Encourage more involvement within the division.</b>	Advancement Sustainability Contest. Record sustainable activities within the department and reward efforts	collect bus tickets, log activity	Cindy Wolffis	Sept. 2011
<b>Use more sustainable paper and printing processes</b>	Use FSC certified paper, paper with more additional post-consumer waste.	monitor purchase agreements and invoices	Bob Alderink	June 2011



## Dining Services Action Plan

Group Members: Rick Balfour, Thia Oracz

Goal	Action	How to monitor	Who is responsible	By when
<b>Current composting is limited and looking into the addition of "SPURT" (a local composting company) to make our composting comprehensive.</b>	Increase its use as systems (collection units) can be put in place.	We will monitor the amounts collected and the decreased waste that is put in the traditional trash disposal unit.	Key Utility Supervisors.	Ongoing
<b>Reduce the use of individual portion sizes in main dining hall line service.</b>	Changing portioning in cooking and serving. Train staff and change serving utensils in main dining hall line service.	Use past production history to new production numbers.	Dining Hall Management	Ongoing
<b>Educate staff and customers about what we are doing and where we are going and what they take with them to incorporate in their lifestyle to be more sustainable</b>	Add this category to our ongoing staff training sessions, and also to our leaderships training sessions.  Develop printed material to post at key locations to reinforce the training materials and keep them in mind.	Difficult to monitor, however, contests for new ideas, and group awareness raisers like our safety bingo contest.	All Management	This next academic year
<b>Increase local purchasing</b>	Building relationships with local farmers, co-ops and vendors who specialize in locally produced product.	Continue to meet with local providers and distributors	All Managers who order product.	Base use is established and seasonal use is growing.
<b>Our Local "Calvin Dining" Sustainable Program With Creative Dining Services GROW/SEED Initiative</b>	Research what we can implement from the "Calvin Dining" Sustainable Program Initiative that is not currently in place and see what other accounts are accomplishing that we may be able to incorporate.	The GROW/SEED Program is to be monitored by Creative Dining Services.	All Management Staff	Ongoing
<b>Reduce Utility Use</b>	As much as possible (with safety considerations taken into account) reduce electrical by:  turning off lights, using less artificial light, installing LED and energy efficient lighting where possible and utilizing natural light whenever possible.  Reduce water use by:  installing low flow valves where ever possible.  Increase the use of the community tray program.  Looking ahead as renovations of dining service start to purchase more energy star appliances. And installing energy use meters. (HOBBS Meters)	Track any changes that we institute. Such as adding signs by all light switches when area not in use. Turning off all display lights at close if a switch is available.	All Staff	For the most part this will be ongoing with the renovation of the dining facilities. But each operation will be evaluated as it stands.
<b>Reduce and Recycle Paper</b>	Only print when necessary. Print in black and white and on draft setting unless color or premium quality is necessary. Utilize printing services for all bulk printing needs and printing on both sides when possible.	We changed the default on all printers to black and white so you have to change the setting to make the printer print in color. We have a tracking device on all printers.	Anyone who uses the printers.	Ongoing

## Education Action Plan

Group members: Debbie Abbott, Clarence Joldersma, Susan VerWys, Cindy Hoekstra

Goal	Action	How to monitor	Who is responsible	By when
<b>Printing reduction to office MFD</b>	Post documents to Moodle classroom	Review Copy Usage reports	All faculty. Dept Chair reviews and promotes.	continuous
<b>Update H/VAC system within the building for consistent control of temp.</b>	Replace current system with newer technology	Physical Plant	Physical plant and college development planners	
<b>Course integration of ways to promote and practice sustainability within the profession</b>	In developing a course and course assignments, one would allow for an area that students can discuss and record ways to reduce, reuse materials.	integrate into the faculty activity reports	faculty	completion of each term
<b>For the college as a whole: Highlight available resources for curriculum integration within the institution</b>	Have an office that would promote sustainability, and an assistant, and training.			

## Financial Services Action Plan

Group Members: Henry De Vries, Tom Van Wingerden, Dave Micele

Goal	Action	How to monitor	Who is responsible	By when
<b>Reduce physical handling and movement of Accounts Payable materials</b>	Implement optical scanning/storage, workflows, and electronic signature to replace paper-based payables documentation with electronic records.	Review percentage of paper vs. digital invoices and vouchers.	FSO - Accounts Payable Team CIT -- Information Services	June 30, 2012
<b>Increase availability and negotiate more favorable pricing of sustainable office supplies alternatives via the Office Max purchasing contract</b>	Request the vendor to provide a list of sustainable alternatives for the top 50 office supply items (by volume) used on campus.	Response from vendor	Campus Store	Dec 31, 2011
<b>Reduce packing material and shipping material waste by working with office supplies vendor</b>	Request contract suppliers/shippers to reduce volume of shipping and packing materials.	Response from vendor and campus	Administrative Assistants Campus Store Mail & Print Services	Dec 31, 2011

## Instructional Resource Center (IRC) Action Plan

Group members: Richard DeVries, Steve Niedzielski, Jake Bosmeijer

Goal	Action	How to monitor	Who is responsible	By when
<b>Tapeless video production</b>	Already doing this. Want to continue with this.			
<b>Digital signage</b>	Increased use of digital signage. But what is impact of saving paper and using more electricity?			
<b>Default to provide online content instead burned to disc</b>	Using Vimeo to house content and distribute to users			
<b>Energy efficient lighting in TV studio and in CAS facilities</b>	Determine current annual costs vs. potential cost savings. Secure funding (CERF?) for new equipment. Make it happen	Is new equipment installed and working? Did we remove old equipment?	Steve N. and Jake B.	within a year or even this summer yet if possible



## Information Technology Action Plan

Goal	Action	How to monitor	Who is responsible	By when
<b>Reduce printing on campus</b>	<p>Encourage smarter printing habits. Develop a culture of digital materials instead of printed.</p> <p>More duplex printing - set default print option to duplex</p> <p>Make sure true printing costs are reflected to departments</p> <p>Make more use of online materials instead printed materials (document repositories, doc management systems)</p>			
<b>Reduce packaging materials coming in the door</b>	<p>Multi-unit packs from vendors</p> <p>Purchase software online and not shipped</p>			
<b>Increase use of power savings technology at desktop and data center</b>	<p>Power saving features on data projectors</p> <p>Use of "green design" technology in data center</p> <p>Better monitoring of desktop power saving settings</p>			
<b>Increased use of electronic statements and invoice processing</b>	<p>Work with Financial Services to develop electronic processing of accounts payable (invoices)</p> <p>Increased use of electronic billing statements (e.g. cell phone statements)</p>			
<b>Reduce transmission of data electrons (significant power savings, lower data storage, etc.)</b>	<p>Install automated programs to strip all vowels, capital letters, and punctuation from every incoming and outgoing email message. (15% savings in data transmission costs)</p>			



## Labs/Hazardous Materials Action Plan

Group members: Heather Chapman, Lori Keen, Jennifer Hoag, Steve Platt, Pat Buist, Jennifer Ambrose

Goal	Action	How to monitor	Who is responsible	By when
<b>Broad understanding of what our waste streams are</b>	Chart waste streams per department - look at quantity, cost, and types of waste generated	Annual reports & communication to CEHS and ESC	Environmental, Health & Safety	October 2011
<b>Reduce hazardous materials</b>	Inventory hazardous materials Conduct hazard assessments on research & lab experiments & art studios	Annual review / audit EHS to conduct review as needed	Environmental, Health & Safety in conjunction with department chairs	July 2011 December 2012

## Library Action Plan

Group members: Steven Putt, Glenn Remelts, Lois Dye

Goal	Action	How to monitor	Who is responsible	By when
<b>Research use of ebooks and eReaders to reduce paper</b>	Research eBook options from various vendors What are the current models available and what will work best for our students, storage issues, distribution issues, faculty buy-in.	usage stats	Steven Putt	measurable progress in a year
<b>Reduce printing</b>	Make it easier to store & share research documents/results electronically	monitor page counts on printers	Glenn Remelts	reduce printing each year
<b>Re-use paper for processing instructions instead of using new paper</b>	Analyze how we can develop a new system in areas we can reduce paper and re-use paper.		Lois Dye	this summer

## Nursing Action Plan

Group Members: Adejoke Ayoola, Renee Boss Potts, Sheri Geddes, Cathy Parks, Dianne Slager

Goal	Action	How to monitor	Who is responsible	By when
<b>Increase use of electronic media for teaching and student work</b>	<p>Faculty members should use electronic resources for course assignments/submissions</p> <p>Make all student classes, meetings, interdisciplinary communications paperless</p> <p>Increase purchase of electronic books for the library and decrease spending on printed books</p> <p>IT to organize trainings to educate faculty members on electronic grading</p>	<p>Encourage faculty members to report in the FAR</p> <p>Faculty/staff in charge of book purchase to focus more on e-books options.</p> <p>Regular annual (e.g. October) meeting between responsible faculty/staff with librarians to review departmental book purchases.</p>	<p>Individual faculty members</p> <p>Librarians</p>	<p>All faculty 25% of their courses in 2 years and 75% of their courses in 4 years.</p> <p>Start now</p>
<b>Increase sustainability efforts by all faculty &amp; staff</b>	<p>Faculty members and staff to report annual sustainability efforts</p> <p>IT to continue with training of faculty members on expected sustainability activities</p>	<p>Continue to make all faculty members and staff report annual sustainability efforts in the FAR</p>	<p>Individual faculty members and staff</p> <p>IT officials</p>	<p>At least 50% of all faculty members and staff to report on sustainability</p>
<b>Make compost opportunities available in all buildings</b>	<p>Provide trash bins for composting in all buildings</p> <p>Make styrofoam and water bottles illegal on campus</p>	<p>Ensuring that the compost bins are available</p> <p>All faculty members and staff and students should drop perishable materials in the compost bin</p>	<p>Physical plant officials</p>	<p>Compost bins to be available in the Science Building as a trial by fall 2011.</p>



## Philosophy Department Action Plan/French Department Action Plan

Group members: David Hoekema, Laura McMullen, Renee DeMoor

Goal	Action	How to monitor	Who is responsible	By when
<b>Reduce unnecessary energy costs</b>	Turn off lights in classrooms Turn off MFD screen Automatic off coffee maker	Walk through department	All	Now
<b>Paper</b>	Use recycled paper	Buy recycled	Admin assistants	Now
<b>Paper</b>	MFD double sided automatic Fix Macintosh double sided MFD problems		Information Technology	
<b>Heating &amp; cooling</b>	Multiple problems, needs to be brought to attention of administration through State of Department reports.		Chairs	
<b>Paper</b>	When possible, do not duplicate documents posted on MOODLE with paper handouts. Track financials electronically rather than making photocopies.		department discussion Administrative Asst	
<b>Encourage faculty / student /staff carpool</b>	Create system to match riders and rides for faculty and staff.		Information Tech sets up a system? Grassroots (all)?	

## Physical Plant Action Plan

Group Members: P. Beezhold, J.TeBrake, K. Vande Streek, M. Hoekzema, H. Kingma, D. Levy, M. Wildschut, E. DeVries

Goal	Action	How to monitor	Who is responsible	By when
<b>Utilize rebates and grants for cost savings</b>	Investigate what rebates and grants are available for "Green" initiatives.	Reduction in spending	Physical Plant/Matt Heun (CERF?)	Fall '11
<b>Introduce more natural green space:</b> -Dorm V -PCC lawn area -Bunkers Hollow	Install native plantings at specified areas, install trees where applicable.	Visual Inspections	Physical Plant/Biology	'11-'12
<b>The RAPID stop(s) on campus</b>	Contact City of GR to investigate possibility of stop(s) on campus.	Confirmation	Physical Plant	Summer '11
<b>Reduce use of plastic water bottles</b>	Reduce the purchase of water bottles on campus	Monitor purchasing	Dining Services	'11
<b>Energy reduction (lighting)</b>	Replace all T-12 fixtures	Energy cost savings	Physical Plant	'12
<b>Utilize new criteria for rating campus energy usage</b>	Investigate new rating systems such as "Energy Star" which allows for building specific energy usage ranking		Physical Plant/ Matt Heun (CERF?)	'12
<b>Energy metering of campus buildings</b>	Install meters on campus buildings energy usage	Monitor meters	Physical Plant	TBD
<b>Geothermal Heating/Cooling</b>	Investigate the use of GeoThermal sites on Campus		Physical Plant	TBD
<b>Inform Calvin community of current sustainable practices</b>	Communicate what's already being done and the intentional reasons behind those practices		Physical Plant Communications/Mkt	TBD
<b>Additional recycling on campus</b>	Create single stream recycling system on campus	Monthly recycling tonnage	Physical Plant	TBD
<b>Control interior lighting</b>	Add occupancy sensors	Reduction in electrical spending	Physical Plant	TBD

**Provost Office Action Plan**

Group Members: Mark Williams, Michelle Loyd-Paige, Ebonie Atkins, Caroline Chadderdon, Razel Jones, Henry DeVries, Tom Van Wingerden, Dave Micele

<b>Goal</b>	<b>Action</b>	<b>How to monitor</b>	<b>Who is responsible</b>	<b>By when</b>
<b>Improve our processes and go more paperless</b>	Give more access to the electronic resources - more wireless internet in more spots - provide more laptops/iPads	Track number of laptops/iPads in departments	Administration and individual offices	
<b>Provide greener course materials (digital textbooks/rented textbooks)</b>	Get electronic resources and provide them to students - or offer ways of renting books instead of selling books	Track sales/rentals	Campus store	
<b>Reduce printing where possible</b>	Multi-function devices - tracking individual/office usage  Faculty prepare materials sooner to send to printing services when appropriate  Education for MFDs	Check readings on machines	Individual offices/printing services	
<b>Purchase greener products from vendors.</b>	Office Max - encourage them to research and offer us more green products for better prices and explore where the products come from	See what options are offered from Office Max at what prices	Administration/individual offices	
<b>Reduce waste in packaging when receiving orders</b>	Let Gretchen and those who deal with vendors to be watchful of how their orders arrived - if packaging is wasteful, we should inform the vendors	Pay attention to how items are shipped from vendors to individual offices	Individual offices/campus store	
<b>Increase recycling efforts on campus</b>	Provide separated recycling bins for individual offices (paper/plastic/cans)	Keep track of where new bins are	Individual offices	

## Science, Technology, Engineering, and Mathematics (STEM) Action Plan

Group Members: Dave Warners, Jeanette Henderson, Mike Troupos, Jacob Vriesema, Rich Nyhof, Doug VandeGriend, Mark Muyskens, Sharon Gould, Dave Koetje

Goal	Action	How to monitor	Who is responsible	By when
<b>Increase energy metering and monitoring capabilities</b>	<ol style="list-style-type: none"> <li>1. Monitor personal office space energy use: appliances (coffee pots)</li> <li>2. Conduct a full energy audit for all labs, classrooms, and offices</li> <li>3. Explore temperature zoning and cycling during off-hours</li> </ol>	Kill-A-Watt meters	CERF intern (?), talk to Matthew Heun.	
<b>Make better use of lighting</b>	<ol style="list-style-type: none"> <li>1. Put atrium lighting on sensor</li> <li>2. Analyze feasibility of solar tubes in ceilings</li> <li>3. Analyze feasibility of smart motion sensor lighting in classrooms and labs</li> </ol>		CERF intern (?)	in the next ten years (?)
<b>Enhance sustainability education, training, and reporting</b>	<ol style="list-style-type: none"> <li>1. Compare sustainability steps at other institutions (collaborations, seminar)</li> <li>2. Improve waste stream and energy stewardship training</li> <li>3. Explore single stream recycling options (incl. plugging into Kent Co system)</li> <li>4. Create recycling cards and posters</li> <li>5. Incentivize recycling efforts</li> </ol>	<p>CEAP invited speakers</p> <p>Waste stream analyses, "garbage on the green" (visual analysis of day's waste stream)</p>	<p>CEAP</p> <p>Environmental Stewardship Committee &amp; Coalition</p>	Spring 2012
<b>Reduce paper use</b>	<ol style="list-style-type: none"> <li>1. Increase use of electronic notebooks and learning materials</li> <li>2. Decrease dependency on printed textbooks</li> <li>3. Set printer defaults to double-sided</li> </ol>	<p>percentage of learning that is paper-free</p> <p>number of electronic learning resources developed and used</p> <p>printer paper use</p>	Academic depts	Spring 2012



## Student Life Action Plan

Group Members: Curt Essenburg, Chris Klein, Ken Heffner, Jolyn Dahlvig

Goal	Action	How to monitor	Who is responsible	By when
<b>Re-usable dishes for residence halls</b>	Van Reken will be a pilot program. Dishes will be purchased and handed out as part of the room inventory.	We will measure the impact on purchasing of disposable dishes.	Curt Essenburg & Chris Klein  (Karis Roper and Lauren Verstrate will purchase items)	Fall 2011
<b>Education on recycling</b>	Educate students on what can be recycled and how to recycle (both on and off campus) - through programming.  Beef up the off campus student website to include information	TBD	TBD	TBD
<b>Eliminate bottled water for bands</b>	Stop providing bottled water for bands  Amend rider for bands to include more sustainable options for water	Track the purchase of bottled water for bands	Ken Heffner	Fall 2011
<b>Issue bus passes at Cokes and Clubs and at SLD breakfast</b>	Work with Campus Safety to make getting bus passes easier for students.	Track the number of passes that are given out at the two events	TBD & Campus Safety	Fall 2011
<b>Using the bus system more</b>	Make an ETC assignment for Prelude riding the bus.	We get numbers from Rapid through the monthly bill. (through campus safety)	TBD & Campus Safety	Fall 2011
<b>Energy Star small fridge for lease</b>	Do not allow students to bring their own mini-fridge.  Give students the option of the renting a mini-fridge.	Track number of machines rented	Residence Life	Fall 2012
<b>Replace retiring vehicles with hybrid or electric vehicles</b>	When new vehicles are needed replace with hybrid or electric vehicles.  Investigate campus safety bikes.			
<b>Preferred parking for hybrid/ electric/ carpooling</b>				
<b>Pre-information on sustainability items for incoming students</b>	Inform students of things that they may not need: mini-fridge, TV, printers, bicycles,			