

Key Word - by Area: Environment / Sustainability

Department Name Business Services # 831
Title Mail Services Address Hygiene Is the Key to Obtaining the Highest Level of Sustainability
University National Association of College Auxiliary Services
Additional Info http://www.sacubo.org/sacubo_resources/best_practices/2007.html
Abstract Walk into a typical campus mailroom and one is likely to see a sight like the one below - postal bins brimming over with catalogs, magazines, newspapers, and letters. Most of the mail pieces are unsolicited with standard-class postage, commonly called commercial/junk mail. Dealing with unsorted, poorly addressed mail imposes significant costs on the college sector and on the environment, hampering the efforts of colleges and universities to become more sustainable.

Here are some recommendations as to how colleges and universities can become more sustainable as well as save money.

1. Establish a Best Practices Mail Policy
2. Raise Mailer Awareness
3. Stress Importance of Using Appropriate Campus Address
4. Encourage Those Leaving Campus to Inform Mailers
5. Participate in a Centralized Address Hygiene Database

College and university mail centers that have adopted measures described above have reduced volume, become more productive and efficient, and have contributed to global sustainability.

Department Name Controller's Office - Travel # 856
Title Is This Trip Really Necessary?
University Inside Higher Ed
Additional Info <http://www.insidehighered.com/views/2007/11/26/appleby>
Abstract The World War II slogan, "Is this trip necessary?," should be revived for all Americans now that we know the disastrous effects of air travel on global warming. Just as patriotic Americans then cut back on unnecessary trips, so should we now limit ours.

Such a commitment should come from nearly all organizations and individuals, but would be especially appropriate for American colleges and universities because they have produced much of the research demonstrating the threat posed by global warming. Yet colleges and universities contribute significantly to the burden of travel with their conference-going, yearly recruitment, and fund-raising activities.

Key Word - by Area: Environment / Sustainability

Department Name	Environmental Health & Safety	# 181
Title	Going Green Saves Green - University of South Carolina's Green Efforts Becoming Best Practices	
University	University of South Carolina	
Additional Info	http://www.sacubo.org/sacubo_resources/best_practices/2003.html	
Abstract	<p>Many institutions agree that environmental or green initiatives are the right thing to do, but think those initiatives are more expensive to implement and therefore fail to do so, particularly in tight fiscal circumstances. As the state's flagship institution, the University of South Carolina's (USC) department of university housing has successfully implemented several "green initiatives" to demonstrate savings possible with such efforts while also setting an example for its students, the university and the state of South Carolina. We believe these initiatives will quickly become best practices. These include but are not limited to:</p> <p>Flat Screen/LCD Computer Monitors: University Housing has replaced all of its 250 computer monitors (CRTs) with new flat screen LCD monitors</p> <ul style="list-style-type: none">· Projected annual savings = \$8,000 in reduced electrical consumption.· Project savings if entire campus switches from CRT to LDC monitors = \$325,466 - \$976,400 annually depending on daily usage. <p>Efficient Washer & Dryers: University Housing has switched all of its 172 washers and 172 dryers to high efficiency front-loading washers and dryers.</p> <ul style="list-style-type: none">· Projected annual savings = \$19,600 in electric and water bills.· Reduced water use by 2 million gallons annually. <p>Alternative Fuel Vehicles: University Housing has implemented the use of four electric vehicles (fuel and operating costs 80% lower than traditional vehicles) for maintenance crews.</p> <ul style="list-style-type: none">· Projected annual savings = \$16,000. <p>West Quad Center for Sustainable Futures: The new "Green Dorm," housing 500 students is designed to LEED (Leadership in Energy and Environmental Design) certified by the US Green Building Council.</p> <ul style="list-style-type: none">· The complex will reduce water consumption by over 20% and energy consumption by 30% as compared to a traditional residence hall· Projected annual savings = \$50,000.· The project is being built at the same cost factor as earlier traditional residence halls. <p>Take It or Leave It - Move Out Recycling: Established a student/staff recycling program at the end of the year in partnership with charitable organizations in the community.</p> <ul style="list-style-type: none">· Projected annual savings = \$30,000 in waste management.· Contributed 40 tons of materials and useable products to community charities such as Habitat for Humanity, Harvest Hope Food Bank, and Salvation Army. <p>These efforts at USC thus far have not only saved money and promoted sustainability, but have also established "best practices" demonstrating that sustainability makes good business sense.</p>	

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Department Name Environmental Health & Safety # 370
Title Indoor Environmental Quality
University Cornell University
Additional Info <http://www.sustainablecampus.cornell.edu/pollution/indoor.html>
Abstract Indoor Environmental Quality is a program of the Department of Environmental Health and Safety (EH&S). The primary goal of this program is to provide and maintain a healthy learning and working environment for students, faculty, staff and visitors in all campus facilities.

The program is implemented through a team approach with representatives from EH&S, Facilities Management, Campus Life, Planning, Design and Construction, and Utilities and involved units. From the design of new facilities to the on-going maintenance of existing ones, programs, resources and services are provided to reduce, remove and prevent indoor air pollutants. Through a proactive approach using state of the art technology and standards, the program provides facilities that are comfortable and safe for building occupants, in addition to being efficient and environmentally friendly. When occupant concerns do arise, processes to gather data, evaluate control methods and recommend improvements are quickly initiated. Many of these initiatives are integral to sustainable campus operations and reducing overall impacts on the environment.

See website for details

Department Name Environmental Health & Safety # 371
Title Stormwater Management Program
University Cornell University
Additional Info <http://www.sustainablecampus.cornell.edu/nature/wetlanddemo.html>
Abstract The Stormwater Management Program is an enterprise of the Environmental Compliance Office (ECO) (leaving site). The primary goals of the program are to comply with federal and state stormwater regulations, protect our water resources, and to minimize the impact of the Cornell community on the Cayuga Lake watershed.

Since its inception in 1993, ECO has worked to mitigate and reduce the effects of erosion and sedimentation from University activities. Currently, a team of four ECO staff members work on various stormwater issues, including an Environmental Field Coordinator whose primary responsibility is construction site stormwater management.

The team currently has the following initiatives underway:
Construction Activity
Municipal Separate Storm Sewer System
Catch Basin, Outfall, and Stormwater Control Maintenance

See website for details

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Department Name Environmental Health & Safety # 447
Title Environmentally Friendly Practices
University University of Alaska
Additional Info <http://ehsrms.uaa.alaska.edu/UAAEnvironmentalSlideShow.ppt>
Abstract University of Alaska Anchorage - provides valuable information and new or improved technologies and best practices to improve environmental conditions.

Apparently they have a comprehensive award winning Environmentally Friendly Program covering -
Recycling Website and Services
Sustainable Energy Society (student club) and Energy Management
UAA's Guiding Policy
Classes, Workshops, Lectures, Conferences, and Seminars
Research, Undergraduate Education & Outreach
Landscaping Using Natural Vegetation
Wildlife Friendly In An Urban Setting
EPA Approved Spill Prevention Control & Countermeasure Plan
State-of-the-Art, Double Hulled, Leak Monitored Fuel Storage Tanks
Low Dust Emission Street Sweepers
Limiting The Use Of Toxic Pesticides
Free & Dependable Transportation Services
Computer Lab Printing Charge and Extensive Use Of Electronic Communications
Procurement Controls On Hazardous Material Purchases and Substitution With Less Toxic Substances
Conversion To Microscale Techniques In The Sciences and Recovery Of Solvents For Reuse In The Sciences
Replacing Computer CRTs with LCD Computer Monitors
"Plug It In" Engine Block Heaters & Timers

Also see <http://greencampus.uaa.alaska.edu/> and <http://ehsrms.uaa.alaska.edu>

Department Name Environmental Health & Safety # 534
Title Rethink, Reduce, Reuse, Recycle
University Concordia University
Additional Info <http://sustainable.concordia.ca/ourinitiatives/r4/>
Abstract R4 Concordia (Rethink, Reduce, Reuse, Recycle) is a working group of the Sustainable Concordia (SC). In the realm of sustainability, which promotes social equity, ecological integrity and economic prosperity, R4 concentrates its efforts on environmental initiatives while integrating social and economic components in its decision making process.

Good website covering the 4 topics - Rethink, Reduce, Reuse, Recycle

See update -http://www.caubo.ca/awards/documents/QP_Rich_UM_Summer_07_E.pdf - page 11

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Department Name Environmental Health & Safety # 703
Title Association for the Advancement of Sustainability in Higher Education
University Association for the Adv of Sustainability in Higher Education
Additional Info <http://www.aashe.org/>
Abstract AASHE is a membership-based association of colleges and universities working to advance sustainability in higher education in the U.S. and Canada. Our mission is to promote sustainability in all sectors of higher education - from governance and operations to curriculum and outreach - through education, communication, research and professional development. Businesses, NGO's, and government agencies can participate as AASHE partner members.

AASHE aims to advance the efforts of the entire campus sustainability community by uniting diverse initiatives and connecting practitioners to resources and professional development opportunities. The association also provides a professional home for campus sustainability coordinators and directors.

AASHE defines sustainability in an inclusive way, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations.

Department Name Environmental Health & Safety # 704
Title University of California Sustainability Policies and Best Practices
University University of California
Additional Info <http://www.ucop.edu/facil/sustain/>
Abstract The site is a great environmental resource. Topics are -

- Latest News and Event listings
- UC Green Building Policy and Clean Energy Standard
- UC Campus Case Studies, Contact Information, and Other Resources
- Links to Other Sustainable Campus Resources

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Department Name Environmental Health & Safety # 727
Title Internet Resources for Campus Sustainability
University Western Washington University
Additional Info <http://myweb.facstaff.wvu.edu/zaferan/camp.sust.res.html>
Abstract Excellent resource listing many links - examples:

Association of University Leaders for a Sustainable future - <http://www.ulsf.org/>

APPA (Association of Higher Education Facilities Officers) - <http://www.appa.org/>

Sustainable Development on Campus: Tools for Decision Makers - (International Institute for Sustainable Development)
<http://iisd1.iisd.ca/educate/>

Blueprint for a Green Campus, Initiatives for Higher Education (A Project of The Heinz Family Foundation) -
<http://www.igc.apc.org/cgv/blueprnt/homepage.html>

Alliance For Sustainability Through Higher Education - <http://www.2nature.org/alliance/>

Site includes many more links. A Google search for Sustainability and Campus, limited to "edu" domains brings up 720,200 listings.

Department Name Environmental Health & Safety # 728
Title Six New Sustainability Principles Adopted
University Harvard University
Additional Info <http://www.greencampus.harvard.edu/about/principles.php>
Abstract Harvard University has announced a set of principles designed to ensure sustainable growth and advance Harvard's record as a responsible environmental steward.

1. Demonstrating institutional practices that promote sustainability, including measures to increase efficiency and use of renewable resources, and to decrease production of waste and hazardous materials, both in Harvard's own operations and in those of its suppliers.
2. Promoting health, productivity and safety of the University community through design and maintenance of the built environment.
3. Enhancing the health of campus ecosystems and increasing the diversity of native species.
4. Developing planning tools to enable comparative analysis of sustainability implications and to support long-term economic, environmental and socially responsible decision-making.
5. Encouraging environmental inquiry and institutional learning throughout the University community.
6. Establishing indicators for sustainability that will enable monitoring reporting and continuous improvement.

Also <http://www.hno.harvard.edu/gazette/2004/10.14/09-sustain.html>

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Department Name Environmental Health & Safety # 759
Title Green Report Card: Colleges Graded
University Sustainable Endowments Institute
Additional Info <http://www.endowmentinstitute.org/sustainability/>
Abstract Seldom has a week gone by this academic year without an announcement that a college has vowed to reduce its greenhouse gas emissions or purchase only locally grown produce. Green building is spreading and institutions are hiring sustainability coordinators to help facilitate environmental programs on campus.
Related stories

The Sustainable Endowments Institute, a two-year-old group that studies university investment policies, has kept tabs on the slew of green initiatives and whether colleges invest in green-friendly ways. In its College Sustainability Report Card being released today, many of the nation's top colleges receive high marks for their campus greening practices. But many of those same colleges receive much lower grades in categories that measure green investment decisions and willingness to share information about how they use their endowment money.

Debra Rowe, president of the U.S. Partnership for Education for Sustainable Development, said the report is valuable because it creates a best practices list for colleges to use and gives a full picture of sustainability. See story at <http://www.insidehighered.com/news/2007/01/24/sustainability>

Department Name Environmental Health & Safety # 771
Title Campus Sustainability Report 2007
University University of North Carolina
Additional Info http://sustainability.unc.edu/Portals/0/Documents/2007%20Sustainability%20Report_web.pdf
Abstract University of North Carolina at Chapel Hill
Adopting more sustainable policies, practices, and curriculum is an ongoing challenge. Sustainability, by its very nature, requires an integrated and holistic approach to decisions and investments. For people and departments accustomed to specializing, requests to view the "big picture" are often difficult. But change we must. As an academic and institutional leader, Carolina is in a position to demonstrate responsibility for the future. Through our research, education, public service, and actions, members of the Carolina community can help to protect and restore the earth's natural systems and to develop new indicators that measure real progress.

Report covers -
Master Plan, Potable Water, Stormwater, Grounds, Buildings, Transportation, Energy, Materials Management, Purchasing, Academics, Smart Growth, Public Service, Outreach, Conclusion, Calendar of Events, Sustainability Resolution and Web Resources.

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Department Name	Environmental Health & Safety	# 790
Title	Talloires Declaration - University Leaders for a Sustainable Future	
University	Association of University Leaders for a Sustainable Future	
Additional Info	http://www.ulsf.org/	
Abstract	<p>The Talloires Declaration is a declaration for sustainability, created for and by presidents of institutions of higher learning. The Association of University Leaders for a Sustainable Future (ULSF) is a leading international non-profit organization working to strengthen the capacity of colleges and universities to make sustainability and environmental literacy a major focus of teaching, research, service, and operations.</p> <p>This document is a declaration that institutions of higher learning will be world leaders in developing, creating, supporting and maintaining sustainability. As of March, 2006, 329 college and university presidents have signed the declaration.</p> <p>Talloires Declaration - www.tufts.edu/talloiresnetwork/TalloiresDeclaration2005.pdf Talloires Network - http://www.tufts.edu/talloiresnetwork/ Wikipedia - http://en.wikipedia.org/wiki/Talloires_Declaration 4/07 - University of Miami President Commits to Campus Sustainability - http://www6.miami.edu/UMH/CDA/UMH_Main/1,1770,2593-1;54616-3,00.html UF Website - http://www.sustainable.ufl.edu/</p>	

Department Name	Environmental Health & Safety	# 816
Title	Testing the Waters: Lessons Learned through Innovative, Sustainable Town-Gown Partnerships	
University	University of Georgia	
Additional Info	http://www.sacubo.org/sacubo_resources/best_practices/2007.html	
Abstract	<p>Watersheds do not always respect political boundaries. Environmental leadership often requires a blurring of these lines. In 2003, the University of Georgia and Athens-Clarke County embarked upon a new level of sustainable partnership through innovative stormwater design.</p> <p>Subsequently, in 2004-05, campus and city officials waded through negotiations regarding implementation of a county-wide stormwater utility. With shared interest in improved natural waterways, the two entities have collaborated and compromised to produce a regional demonstration in sustainable design and resource management.</p> <p>Benefits - Stormwater Management The stormwater best management practices employed are providing a regional demonstration. Not only does the sharing of resources promote similar opportunities for other towns and campuses, but the implementation of restorative stormwater design provides an example of how future developments can meet the impending NPDES Phase II water quality regulations. The project's educational benefits also are observed by the local and university communities.</p> <p>Benefits - Stormwater Utility Likewise, the partnership forged to develop a compromise on the issue of the stormwater utility serves as a demonstration to other colleges and universities in the University System and elsewhere. It is therefore prudent, both financially and environmentally, to incorporate water quality design into campus development as soon as possible.</p>	

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Department Name	Environmental Health & Safety	# 868
Title	How To Operate as an Environmentally Aware Organization and Reduce or Eliminate Your Carbon Footprint.	
University	Guidance	
Additional Info	http://www.guidance.com/images/green/guidance_green_toolkit.pdf	
Abstract	<p>Guidance (http://www.Guidance.com) today unveiled a best-practices guide to help companies of any size operate as environmentally aware organizations and reduce or eliminate their carbon footprints. The guide includes strategies learned from the company's own experience throughout its quest to help create a sustainable environment.</p> <p>The report is a step-by-step guide helping companies evaluate their operations, calculate their carbon footprint and take action. It covers strategies for reducing or eliminating consumption of non-renewable resources like energy, paper and plastic, ideas for incorporating recycling programs, and suggests ways to offset the amount of carbon dioxide the company releases into the atmosphere through its activities.</p> <p>Table of Contents Step 1: Assemble a taskforce to lead your environmental initiative Step 2: Develop a Mission Statement Step 3: Evaluate your consumption of non-renewable resources and develop strategies for reducing and/or eliminating consumption where possible Step 4: Recycle, recycle, recycle !!! Step 5: Offset your remaining carbon footprint . Step 6: Look beyond your immediate workplace to find ways to take your environmental commitment into the community Step 7: Encourage your vendors and business partners to adopt similar environmental policies and practices Green Resources: Information and resources to help you and your organization be as "green" as you can be</p>	

Department Name	Environmental Health & Safety	# 935
Title	Sustainability at UC	
University	University of California	
Additional Info	http://www.universityofcalifornia.edu/sustainability/	
Abstract	<p>The University of California has embraced the goal of sustainability and is transforming its business practices to reduce its environmental impact and fight global warming. By cutting waste and improving efficiency, UC's sustainability initiatives demonstrate the University's commitment to wise stewardship of state resources. In June 2004, President Dynes issued detailed guidelines for the Policy on Green Building Design and Clean Energy Standards. This comprehensive policy established the university as a leader in promoting environmental stewardship among institutions of higher education.</p> <p>In January 2006, the policy was expanded to include sustainable transportation practices and greenhouse gas emissions reductions. In March 2007, the policy was further extended to cover the areas of climate protection practices, green building renovations, sustainable operations and maintenance, waste reduction and environmentally preferable purchasing. With the most recent expansion, the policy's name was revised to Policy on Sustainable Practices.</p> <p>Policy - http://www.universityofcalifornia.edu/sustainability/documents/policy_sustain_prac.pdf Best Practice Case Studies - http://www.universityofcalifornia.edu/sustainability/enrg_bestprac.html</p>	

Key Word - by Area: Environment / Sustainability

Department Name Environmental Health & Safety # 1028

Title America's Greenest Colleges and the Dirtiest

University Sustainable Endowments Institute

Additional Info <http://www.greenreportcard.org/>

Abstract If you've ever wondered which colleges are the greenest in America, the results have been tabulated. The green grades are also in for the colleges and universities which are behaving more like polluting Hummer owners.

The Sustainable Endowments Institute just released its green report cards on the schools that have embraced the best "green" practices. The institute looked at the 300 colleges and universities which enjoy the largest endowments along with 32 other schools that asked to be evaluated. The 332 schools, which included 141 state institutions, enroll more than 4.2 million students.

Grades ranged from A- to D-; FAU received a B-

Key Word - by Area: Environment / Sustainability

Department Name	Environmental Health & Safety	# 1033
Title	Green Teams: Engaging Employees in Sustainability	
University	GreenBiz.com and Green Impact	
Additional Info	http://www.greenbiz.com/sites/default/files/GreenBizReports-GreenTeams-final.pdf	
Abstract	The latest in our series of GreenBiz Reports, researched and written by Deborah Fleischer, the president of Green Impact, explores and outlines the 10 best practices for bringing all your employees on board with your company's sustainability projects.	

From the executive summary of the report: Green teams are self-organized, grassroots and cross-functional groups of employees who voluntarily come together to educate, inspire and empower employees around sustainability. They identify and implement specific solutions to help their organization operate in a more environmentally sustainable fashion. Most green teams initially focus on greening operations at the office, addressing such issues as recycling in the office, composting food waste, reducing the use of disposable take-out containers and eliminating plastic water bottles.

This focus on operations is evolving and some green teams are beginning to focus their efforts on integrating sustainability into employees' personal lives, while others are aligning their efforts to support broader corporate sustainability objectives. The business value of integrating sustainability into these three levels includes: cost savings by integrating energy efficiency into the workplace and products and services; attracting and retaining the best and brightest talent who want to work for companies with an authentic green commitment; and increased market share and revenues resulting from a stronger brand and new, innovative green products and services.

Also see <http://www.greenbiz.com/blog/2009/12/07/10-best-practices-building-green-teams>
Best Practices

The report concludes with a detailed summary of 10 best practices for green teams, with specific examples from leading companies. The best practices detailed include:

1. Start with the visible and tangible: focus on internal operations
2. Get senior management involved, but don't lose the grassroots energy
3. Engage employees to capture ideas
4. Communicate and share best practices
5. Engage employees with their bellies: the low carbon diet campaign
6. Engage employees in their personal lives
7. Engage customers to be part of the solution
8. Use art to raise awareness
9. Create a toolkit to support and guide green teams
10. Align green teams with corporate sustainability goals

Key Word - by Area: Environment / Sustainability

Department Name	Facilities/Facilities Planning	# 372
Title	Pollution Prevention	
University	Cornell University	
Additional Info	http://www.sustainablecampus.cornell.edu/pollution/contract.html	
Abstract	<p>Cornell's construction projects, if improperly managed, could have big impacts on the local environment. To keep those impacts under control, Cornell uses a number of compliance tools. One of these tools is the use of the Contract Documents to inform the contractor of their obligations and responsibilities for protecting the environment.</p> <p>Cornell General Requirements and General Conditions (GRs and GCs) are part of every project the endowed campus manages. Contract College facilities also have their own GRs and GCs, often based on the policies created by the State University Construction Fund.</p> <p>The GRs and GCs specify the contractor's role in protecting the environment during their work on campus. Elements of these GRs and GCs include the following: (See above website)</p>	

Department Name	Facilities/Facilities Planning	# 810
Title	Leadership in Energy and Environmental Design (LEED) Certification - Success Story by the University, for the University	
University	University of Florida	
Additional Info	http://www.sacubo.org/sacubo_resources/best_practices/2007.html	
Abstract	<p>University of Florida's (UF) Leadership in Energy and Environmental Design (LEED) certification pledge for all major renovation and new construction projects was another way UF exhibited its commitment to the environment as well as to its students, faculty, and staff's well being. UF's Facilities Planning and Construction Division adopted LEED standards when the United States Green Building Council (USGBC) was in its infancy in 2001. Since then, UF has obtained the first LEED GOLD certified building in the state of Florida, has four additional projects in the certification process, and has about 14 project registered with the USGBC for future LEED certification.</p> <p>While many other universities rely upon professional consultants to lead them through the LEED certification process, UF Facilities Planning and Construction Division took the initiative to manage the LEED certification process for all of its projects without the added expense of hiring "outside" consultants. Our goal was to design and construct new buildings to maximize efficiency and to protect our occupants' health and well being at no significant additional monetary increase to the projects.</p>	

Key Word - by Area: Environment / Sustainability

Department Name Facilities/Facilities Planning # 858
Title Towards Best Practices in Facilities Management: Incorporating Sustainability into FM at the Caribbean Higher Ed Institute of the Future
University ACHEA Conference
Additional Info <http://sta.uwi.edu/achea/downloads/ACHEA%202007/JohnNTelesford.pdf>
Abstract Higher education institutions (HEI's) such as universities, community colleges, technical and vocational schools and research institutions should have high performance facilities if they are to maintain competitiveness and be attractive to faculty and students into the future. Facilities management is an administrative function that is important in assisting HEI's in achieving the necessary performance required by their facilities to move towards the campus of the future. In fact research has shown that increased competition and energy/environment were high driving forces that will cause universities to move to more ecologically sustainable buildings that can provide that competitive edge. It was also shown that the overall quality of the HEI's physical facilities impacted on student recruitment and retention. Sustainability or ecological sustainable development (ESD) is a key enabler of the higher education institution of the future. The facilities management professional within the HEI is in the best position to incorporate sustainability into the business as usual administration of the HEI. This can be achieved through sustainable facilities management or SFM.

Department Name IRM # 536
Title Campus Computing and the Environment
University University of Guelph
Additional Info <http://www.isc.uoguelph.ca/documents/060301GreenComputingReport-Draft3.doc>
Abstract In response to the release of the study Environmental Impact of Computer Information Technology in an Institutional Setting: A Case Study at the University of Guelph the ISC struck a Green Computing Task Group to review policies, guidelines and practices at the University of Guelph with respect to the purchase, use and disposal of computers, in order to make recommendations that would mitigate the environmental impacts of computing on campus. Computers are defined as desktop units which typically include; central processing unit, monitor, keyboard, mouse and external speakers; and laptop and notepad computers which include all of the above components in a single unit.

Specific Objectives:

- * identify green computing best practices at other universities and in other sectors
- * benchmark the University of Guelph against these best practices
- * examine the need for and nature of computing procurement guidelines
- * identify energy conservation strategies and practices
- * identify equipment disposal procedures
- * recommend a campus awareness program

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Department Name	IRM	#	944
Title	Environmental best practices in ICT in Higher Education report		
University	Computing for Sustainability		
Additional Info	http://computingforsustainability.wordpress.com/2009/01/27/environmental-best-practices-in-ict-in-higher-education-report/		
Abstract	<p>Short story: return of the data centres (but with a green tinge).</p> <p>The chapter is structured around taking action. Data centres are seen as an important area with rapidly expanding data storage requirements. These, though, have a "hidden environmental footprint" with "rapidly growing energy consumption". They give three scenarios.</p> <p>Blogs about: Computing For Sustainability - http://wordpress.com/tag/computing-for-sustainability/ Also see http://computingforsustainability.wordpress.com/2009/01/27/balancing-benefits-and-invisible-overheads-in-ict-in-higher-education-report/</p>		
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Department Name	Physical Plant	#	381
Title	Water Runoff Management		
University	Mississippi State University		
Additional Info	http://www.abe.msstate.edu/ - Original URL no longer valid		
Abstract	<p>Large website related to Water Runoff Management - includes -</p> <ul style="list-style-type: none">A. Construction Site Impact Reduction (8)B. Source Reduction (16)C. Erosion Control (19)D. Water Volume Management (14)E. Water Quality Treatment and Constituent Entrapment (vegetative and/or structural) (32) <p>http://abe.msstate.edu/csd/NRCS-BMPs/tree.html gives 3 Best Practices for Tree Protection and Restoration</p>		
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Department Name	Physical Plant	#	382
Title	Pest Management at NCSU		
University	North Carolina State University		
Additional Info	http://www.ncsu.edu/ehs/www99/right/handsMan/worker/pestpolicy.htm		
Abstract	<p>Structural and landscape pests can pose significant problems to people, property, and the environment; however, the pesticides used to solve these problems carry their own risks. It is therefore the policy of NC State University to use best practices and procedures, as explained below, for control of structural and landscape pests.</p> <p>Goes on to define "Pests," how to manage pests using "Best Practices and Procedures", followed by education, recordkeeping, notification/pesticide sensitivity, pesticide storage and disposal, applicators and exemptions.</p>		

Key Word - by Area: Environment / Sustainability

Department Name Physical Plant # 772
Title Plant Services Best Practices Awards
University Plant Services Magazine
Additional Info <http://www.plantservices.com/industrynews/2006/027.html>
Abstract Our Best Practices Awards recognize management technique, work process, product and service implementations as expressed in a short application story. The contest is open to anyone with a good story and the right to tell it. Site lists articles about:

* Best Practices Awards - Management - <http://www.plantservices.com/articles/2007/045.html>
* Best Practices Awards - Energy - <http://www.plantservices.com/articles/2007/043.html>
* Best Practices Awards - Predictive - <http://www.plantservices.com/articles/2007/046.html>

Department Name Physical Plant # 834
Title Being Green: Changing Tomorrow, Today
University University of Central Oklahoma
Additional Info <http://www.nacubo.org/Images/about/UniversityofCentralOklahomaSubmission.pdf>
Abstract 2007 NACUBO Innovation Award Winner
1. The employees of the Physical Plant explored a move from Petrol-diesel to Bio-Diesel fuel for their equipment. Bio-Diesel fuel produced for diesel engines from vegetable oil or animal fat, which is normally costly to discard. The change allowed UCO to embrace a more economical fuel source, a more environmentally friendly fuel substitute, and create a template for other interested parties to implement.

A byproduct of the Bio-Diesel process is glycerin and is used as a degreaser and soap for the mechanics. The college of Math & Science and the College of Business have joined efforts in using Bio-Diesel as a medium for learning.

2. In 2004 UCO set a goal to become 100% Green energy dependent by 2007. During the process it was discovered that the resources were insufficient to undertake such a project. This led to an innovative partnership with Johnson Controls, Inc. relating to wind energy.

Key Word - by Area: Environment / Sustainability

Department Name	Physical Plant	# 904
Title	Green University: Changing Tomorrow, Today	
University	University of Central Oklahoma	
Additional Info	http://www.sacubo.org/sacubo_resources/best_practices/2008.html	
Abstract	<p>The increasing cost of energy has been a substantially impacting issue that UCO chose to overcome. UCO came to a crossroads. How can we curb the cost of energy while being stewards of the environment in which we reside? UCO focused on the following innovative facets: 100% Green Energy use, on-site creation of Bio-Diesel, Performance Contracting, Lean, and Recycling Campaign.</p> <p>Green/Wind Energy - To date, UCO has saved over \$51,000 in purchasing over 50,000,000 kwh of electricity provided via wind.</p> <p>Bio-Diesel - The Physical Plant invested time, money, and labor into the development of Bio-Diesel. Through this investment there has been a reduction of hazardous fuel use on campus and fuel budget savings by utilizing university produced Bio-Diesel fuel.</p> <p>Performance Contracting - Since its implementation more than \$3.8M has been saved and we have reduced our CO2 emissions by 60,000,000 pounds which equals nearly 90,000 trees needed to absorb that amount of CO2.</p> <p>Lean University - The outcome was a need to overhaul a multitude of administrative processes that over time had strangled the university's ability to function efficiently. One focus is the effort to move processes to paperless.</p> <p>Recycling Campaign - The program is designed to make recycling easy and accessible to all students, faculty, staff and campus guests.</p>	

Department Name	Physical Plant	# 922
Title	California Higher Education Sustainability Awards	
University	California State University, Calif C/C & Univ of Calif	
Additional Info	http://www.greenbuildings.berkeley.edu/best_practices.htm	
Abstract	Lists best Practices for 2005 through 2008. The Best Practice case studies showcase each award-winning project, making the strategies and achievements available as an educational tool to assist all campuses in achieving energy-efficiency and sustainability goals. California State University (CSU), California Community College (CCC) and University of California	

Key Word - by Area: Environment / Sustainability

Department Name Physical Plant # 1042
Title High Efficiency Cleaning
University Wright State University
Additional Info [http://www.cacubo.org/pdf/2007/Wright%20State%20University%20\[High%20Efficiency%20Cleaning\].pdf](http://www.cacubo.org/pdf/2007/Wright%20State%20University%20[High%20Efficiency%20Cleaning].pdf)
Abstract For a number of years, Wright State University has used a combination of university employees and a contractor to provide custodial services to its main campus. In 2005, we took on a project to reengineer our custodial function to improve campus satisfaction and to reduce costs.

Wright State University takes pride in their High Efficiency Cleaning Program utilizing the Kaivac No-Touch Cleaning System for restroom cleaning, ProTeam Super Coach Back Pack Vacuums for office cleaning along with task specialist training and implementation which provides greater productivity, more thorough cleanliness, increased employee accountability and quality customer satisfaction.

Department Name Physical Plant - Transportation # 330
Title How the Reengineered Solid Waste Operation Produces \$400,000 in Annual Savings
University University of Miami
Additional Info <http://www.appa.org/FacilitiesManager/article.cfm?itemnumber=1188&parentid=1188>
Abstract Scroll down on above URL

Institutional Benefits

Described by former president Tad Foote as a "Campus in a Tropical Garden," the University of Miami's meticulously maintained Coral Gables campus consists of over 100 buildings on 260 acres. An enhancement to that vision has been our unique in-house trash collection program. Implemented in October 1992, this program produces \$400,000 in annual savings while providing numerous aesthetic and management benefits.

Unlike 35-ton commercial garbage trucks, our employee-operated customized flatbed truck weighs only 6.2 tons when fully loaded with three custom-made containers being hauled to one of several compactors located in convenient but secluded perimeter locations. Consequently, our commercial hauler can now charge by actual weight, rather than potential volume, so costs reflect monthly fluctuations in trash output.

Additionally, the removal of commercial trash trucks from internal campus areas reduces wear and tear on campus roads, eliminates the windswept material, glass particles, and offensive odors generated by on-site trash transfer, and allows for flexible pickup schedules tailored to each campus facility, virtually eliminating customer complaints with regard to trash collection. Additionally, much of the \$4 million in cumulative savings created by this process reengineering has been reinvested into plazas, major landscape features, and other campus beautification projects.

Key Word - by Area: Environment / Sustainability

Department Name Physical Plant - Transportation # 1031
Title 'Genesis 2015' plan to create petroleum-free fleet
University University of South Carolina
Additional Info <http://www.automotive-fleet.com/News/Story/2009/12/University-of-S-Carolina-Unveils-Fleet-Greening-Plan.aspx?interstitial=1>
Abstract Also see <http://www.sc.edu/vmps/AFV.html>

The University of South Carolina unveiled its "Genesis 2015 Initiative" that will create a college campus with 90 percent fewer carbon-dioxide emissions from its fleet of vehicles within five years. The plan puts Carolina among the nation's first campuses committed to reducing its dependence on petroleum by introducing alternative fuels to power the buses, cars, trucks, motorcycles and maintenance vehicles needed in the everyday life of the university.

The university has about 400 vehicles that are used for business, maintenance and transportation of students, said Derrick Huggins, associate vice president for transportation. Within five years, all vehicles on the Columbia campus will be powered by ethanol, biodiesel, liquefied petroleum gas (LPG), electricity or hydrogen fuel cells. A hydrogen hybrid bus will become part of the university's shuttle service in January.

"We have 156 vehicles that we can convert to alternative fuel right away," Huggins said. "This plan underscores the fact that the University of South Carolina is a leader among colleges and universities in sustainability efforts, including transportation, which is a key source of carbon emissions."

Michael Koman, the university's director of sustainability, said Genesis 2015 will reduce Carolina's carbon-dioxide emissions by more than 2,000 tons. Moreover, switching to alternative fuels may boost the agricultural economy across the Palmetto State. "Farmers could plant crops to meet fuel and food demands," Koman said, adding that soybeans, corn and switch grasses have the potential to generate extra income for farmers.

Key Word - by Area: Environment / Sustainability

Department Name Physical Plant - Utilities # 355
Title Water Conservation Program
University Department of Defense Quality Management Program
Additional Info <http://quality.disa.mil/case/CaseStudyRecord.cfm?ID=23501>
Abstract Iwakuni MCAS, Japan
Old Process: A complete station-wide water leak study had never been done. Many of the pipes on the air station were very old and prone to leaking. Leaks are hard to detect because the water table is very near the surface and the soil is sandy. Leaks were occurring and water was being wasted. There was no comprehensive plan in place to do station-wide audits of the use of utilities or regular monitoring of water consumption.

New Process: There are outreach and training programs. The annual Energy Awareness Week focuses attention on the need for water conservation. Energy monitors check on water usage and issue notices on leaky faucets and fixtures, unattended running hoses. Several water conservation initiatives have been implemented. Water pressure has been reduced and water saving devices have been installed in all residential areas and temporary lodging areas. There are annual station-wide audits. Water usage is monitored daily for any irregularities. If any are found, a water leak survey is done to find leaks. In FY 2000 an extensive water leak survey was done which found leaks whose flow was equivalent to a loss of over 29 million gallons in a year.

Results: The Conservation Program has resulted in water costs being reduced by 7% in FY 2001 and over 8% in FY 2002.

08/08 - Website down at this time

Department Name Physical Plant - Utilities # 975
Title Every Drop Counts: Implementing Effective and Sustainable Water Conservation
University University of Georgia
Additional Info http://www.sacubo.org/sacubo_resources/best_practices/2009.html
Abstract The success of the "Every Drop Counts" campaign is largely due to two factors: 1) the implementation of operational changes by the Physical Plant, including the installation of water-saving devices; and 2) the effectiveness of an awareness campaign to change the habits of faculty, staff and students. This combination yielded impressive benefits that continue today: water savings of more than \$250,000 and a 28 percent reduction in consumption (18 percent more than the reductions mandated by the Governor). Much of the savings have resulted in the research arena, where faculty members have collaborated with the Physical Plant staff to identify and implement solutions to water-wasting practices. True to its mission as a land-grant and sea-grant institution, the University of Georgia continues to serve as a role model by not only reducing its own water consumption but also by demonstrating to the citizens of the state through teaching, research and service how water conservation can be improved statewide.

Key Word - by Area: Environment / Sustainability

Department Name Purchasing Department # 789
Title Green Purchasing at Yale
University Yale University
Additional Info http://www.yale.edu/procurement/green_purchase.html
Abstract Scott Lucker, purchasing card manager, said Yale offers a university-wide initiative to help the environment by promoting a greener campus. In partnership with several strategic vendors, Yale Procurement identified products that are made with recycled content, have reduced packaging, are energy efficient and do not create hazardous waste. Cardholders and other purchasers are encouraged to purchase these suggested goods and services for research and education

As part of a university-wide initiative to help the environment by promoting a greener campus, Yale Procurement would like to make it easy for you to buy "green". In partnership with several of our Strategic Vendors, Yale Procurement has identified products that are made with recycled content, have reduced packaging, are energy efficient and do not create hazardous waste. We encourage your commitment to purchasing these suggested goods and services for research and education. Together, we can help to make a difference in our Yale community and in the greater world environment!

Department Name Traffic & Parking # 756
Title Reducing traffic on campus one vehicle at a time
University University of California Berkeley
Additional Info http://www.berkeley.edu/news/berkeleyan/2004/04/14_bestpr.shtml
Abstract (Scroll to bottom) Later this month, Parking & Transportation will introduce its latest initiative to support employees and students who bike to campus. More than 200 new bicycle-parking spaces in covered, locked cages or under security-camera surveillance will be made available to those who commute to campus on two wheels.

"Having a dry, safe place to leave your bike is a high priority for cycling commuters," says transportation planner Kira Stoll, "and just one of the many programs we provide to encourage transportation alternatives for use by faculty, staff, and students."

Other highlights include a program enabling employees to purchase transit tickets for BART or AC Transit with pre-tax dollars; Bear Transit shuttles that carry riders from downtown Berkeley to stops as far away as the Richmond Field Station; and a range of parking-fee reductions for those who carpool or vanpool. The campus also provides free California bicycle licensing, discounts on high-quality bike locks, and campus bike paths and parking.

One program that faculty and staff may not be aware of, the Guaranteed Ride Home Program, offers free rides in the event of a personal emergency. For more information - http://pt.berkeley.edu/transportation_alternatives/bicycle_information/bike_plan.html

Key Word - by Area: Environment / Sustainability

Department Name	Traffic & Parking	#	757
Title	Commuter programs provide incentives		
University	University of Vermont		
Additional Info	http://www.uvm.edu/greening/envcouncil/trackinguvm.pdf - Page 10		
Abstract	UVM is a member of the Burlington-based Campus Area Transportation Management Association that includes the hospital and nearby institutions. CATMA's annual survey results show a decline in the use of single-occupant vehicles to campus, with a rate of less than 70% at UVM compared with local and national rates of 80%. Faculty and staff use mass transit at a rate of -6%, compared with a national average of 2%.		

CATMA and UVM together provide incentives to commuters to walk, ride bicycles, carpool, and take public transportation:

- * Coordination between campus and community public transportation systems
- * Reduced rates on bus passes
- * Gift certificates to downtown businesses
- * Closer parking spaces for carpoolers
- * Guaranteed ride home for people who commit to commuting alternatives
- * Parking fees based on proximity to main campus (zoned parking)
- * Well enforced parking policies with high fees for violations

In addition, UVM allows flexible work schedules and telecommuting as ways to reduce traffic congestion and provides free parking off campus served by shuttles.

Key Word - by Area: Environment / Sustainability

Department Name	University Advancement	# 955
Title	WSU Publishing renews certification	
University	Washington State University	
Additional Info	http://www.wsutoday.wsu.edu/pages/publications.asp?Action=Detail&PublicationID=13816&PageID=21&ReferrerCode=%2Fcntf%2Fchoyv	
Abstract	<p>WSU Publishing is scheduled next month to renew a pioneering chain of custody re-certification obtained through the Forest Stewardship Council, a non-profit organization dedicated to responsible management of the world's forests and the products derived from them.</p> <p>The official publishing agency of WSU, and the university's largest user of paper products, University Publishing was the first university publisher in the nation last year to receive FSC chain of custody certification. The designation provides assurance that products used by University Publishing originate in forests managed to meet FSC principles and criteria, which relate to environmental and legal issues and indigenous and labor rights.</p> <p>Since WSU was initially certified in March of 2008, the publishing organizations of more than ten other universities across the nation have either received or applied to receive FSC chain of custody certification.</p> <p>Steve Rigby, WSU director of printing, said "we feel it is important to strengthen our commitment to sustainable practices by continuing this certification. We now include the FSC trademark on eligible printed pieces to demonstrate WSU's commitment to sustainability and responsible use of forest products."</p> <p>Rigby said certification is one of several best practices University Publishing follows to ensure that all printed pieces are produced in a responsible way. Other green practices include the use of soy-based inks, recycled papers, and solvents that are better for the environment and human health, and a robust waste management program, he said.</p> <p>See http://www.scsccertified.com/forestry/forest_coc.html</p>	

Key Word - by Area: Environment / Sustainability

Department Name	University Wide	#	906
Title	Holistic Integration of Sustainability Principles and Practices at the University of Florida		
University	University of Florida		
Additional Info	http://www.sacubo.org/sacubo_resources/best_practices/2008.html		
Abstract	<p>The sustainability committee has developed four task forces to address goals within the university. Following are the missions of those task forces.</p> <p>Energy and Buildings - In 2001, UF adopted the Leadership in Energy and Environmental Design (LEED) standards for all major new construction and renovation projects.</p> <p>Carbon Neutrality - Committed UF to creating an action plan for becoming carbon neutral and to adding the impacts of air travel and commuting to its original greenhouse gas inventory.</p> <p>Food and Dining - Worked with its dining services provider, ARAMARK/Gator Dining Services, to develop an action plan for implementing principles of sustainability into food service operations, including regional sourcing of food, green catering, waste management and diversion, energy conservation, transportation impacts, and sustainable procurement.</p> <p>Parking and Transportation - The university has committed to purchasing only hybrid or alternative fuel vehicles, whenever possible. UF helps campus commuters find carpool partners, offers free bus fares, provides bicycle lanes.</p> <p>Land Use - The Campus Master Plan outlines policies for responsible stewardship of land resources and sustainable development.</p> <p>Purchasing - The university has instituted a sustainable purchasing policy to support the purchase of products that will minimize any negative environmental or societal impacts of university operations.</p> <p>Waste - UF, through waste reduction and recycling initiatives, achieves a waste recovery rate of nearly 40%.</p> <p>Water- Over 90% of the university's irrigation needs are met by the reclaimed water system.</p> <p>Social Equity - The University of Florida has set aggressive hiring and retention goals to ensure the university reflects society's racial, ethnic and gender diversity.</p> <p>Curriculum & Research - The University Provost has signaled her support of an academic focus on sustainability.</p> <p>Community Service and Outreach</p>		