University Sustainability Council

DRAFT Meeting Summary

March 31, 2011

Attendees:

Frank Brewer, Interim Vice President for Administrative Affairs (Chair)
Linda Clement, Vice President for Student Affairs
Sally Koblinsky, Assistant President and Chief of Staff
Mahlon Straszheim, Associate Provost, Academic Affairs
John Farley, Assistant Vice President for Administrative Affairs
Scott Lupin, Associate Director, Environmental Safety and Director, Office of Sustainability
Joan Kowal, Energy Manager, Facilities Management
Jay Elvove, Manager, OIT
Monette Bailey, Senior Writer/Editor, University Relations
Allen Davis, Professor, Civil and Environmental Engineering
Matthias Ruth, Professor, School of Public Policy
Karen Lips, Associate Professor, Biology
Barrett Dillow, Graduate Student, Aerospace Engineering

Invited Guests:

Jim Stirling, Director, Procurement and Supply

Meeting start time: 11:30am

Meeting Highlights

Paper Purchases and UM Environmentally Preferable Purchasing Policy

Matthew Popkin, Undergraduate Student, Government and Politics

Scott Lupin and Jim Stirling presented a draft Environmentally Preferable Purchasing Policy that includes a mandate that the campus move toward procuring only general purpose paper made from 100% post-consumer recycled content. **See Appendix A**.

- Council members agreed it is not necessary to phase in this mandate over two years and that July 1, 2012 is an appropriate date for full compliance with the mandate.
- Jim Stirling will see if OfficeMax and Rudolph's can eliminate non-compliant general purpose paper from their online catalogues that University of Maryland employees use.
- Jay Elvove mentioned it would be good to stop the proliferation of desk side printers, which cost a lot to support and often print single-sided; however, he thought this should be addressed independent of the Environmentally Preferable Purchasing Policy.

ACTION: Scott Lupin and Jim Stirling will revise the EPP and email the revised draft to Council members, who should review and vote on the draft so it can go to the President's Cabinet in April.

Briefing: City of College Park/UM Green Power Community

Scott Lupin and Joan Kowal reported on an a meeting they and Mark Stewart (Office of Sustainability) had with Andy Fellows, the Mayor of College Park, and other City officials about the EPA Green Power Community program. The purpose of the program is to recognize communities that purchase at least

3% of their total electricity load from renewable resources (renewable energy that counts toward meeting State Renewable Portfolio Standards cannot count toward the Green Power Community program). The University of Maryland represents 40% of the electric load of College Park. While the University is confident it can meet its part of the Green Power Community requirements, the City needs some time to collect data on the current level of renewable energy usage among residents and businesses in College Park.

• Council members agreed that this is a good partnership with the City. Sally Koblinsky said this sort of community partnership is consistent with President Loh's thoughts on the role of a Land Grant institution.

Green Office Program

Aynsley Toews (Office of Sustainability) presented a PowerPoint presentation about the forthcoming Green Office program, which will incentivize and recognize campus offices (departments and other units) that decrease environmental impacts. See Appendix B for the presentation.

 Matthias Ruth suggested the Office of Sustainability sync the Green Office program with the Climate Action Plan so that goals are consistent between those two initiatives.

University Sustainability Fund – Branding and Outreach

Fran Avendano (Office of Sustainability) presented a PowerPoint presentation on the draft signage and sustainability branding concepts that Professor Audra Buck-Coleman's graphic design class is developing for University Sustainability Fund projects and the Office of Sustainability. **See Appendix C for the presentation**.

- Scott Lupin added that the objective is to come up with a concept to take to ADSB for review.
- Frank Brewer mentioned that there is a Campus Signage Standards Subgroup of the Facilities Master Plan Committee. If signs will be installed on campus, they will need to meet the standards developed by this subgroup.
- Karen Lips suggested a mobile app for the campus tour instead of a printed map.
- Matthias Ruth suggested the campus redesign its primary interactive map that most people use
 to add layers to that (for sustainability features, the Arboretum tour, visitor parking lots, tailgate
 lots, etc.) instead of having many different maps that are hard to find.

Student Advisory Subcommittee: Use of University Sustainability Fund Balance

Matthew Popkin presented a request to use \$2,333 of the remaining University Sustainability Fund balance to develop signage for the projects that received grants from the Fund this year. Frank Brewer agreed to match the request with \$2,333 from the Division of Administrative Affairs. Part of the money would be used to purchase fonts so that graphic designers (in the graphic design studio and in the Office of Sustainability) can use the same font family used on existing campus signs. The other part of the money would go toward producing the physical signs.

• Jay Elvove said he could talk with Software Licensing to see if they can get a better deal on font.

ACTION: Council unanimously approved the request for funding.

Sustainability Minor

Mahlon Straszheim provided a brief update on the committee charged with designing the forthcoming sustainability minor. Committee members are reviewing a list of courses that could count toward the minor. The committee will have a proposal ready by the end of April to put forward to the Provost and Council of Deans in May.

Bottled Water Workgroup

The Bottled Water Workgroup members have been identified and the first meeting is scheduled.

Council Nominations

Nominations were due by April 1, 2011. The President will make appointments by the end of April and new Council members will be named at the Council meeting on May 5, 2011. Sally Koblinsky is returning to the faculty of the School of Public Health and Michele Eastman, the new Chief of Staff, will replace Sally on the Council starting with the May meeting. Frank Brewer thanked Sally for her active participation on the Council.

Other Announcements

- The Smart and Sustainable Campuses Conference will be held at the UMUC Inn and Conference Center on April 3-5, 2011.
- UMD is currently ranked #1 in the Atlantic Coast Conference in the RecycleMania competition.
- The annual Earth Day celebration will be held on April 22, 2011 on McKeldin Mall.
- The Office of Sustainability will be accepting applications for the Chesapeake Project starting on April 4, 2011.
- The School of Engineering is hosting their annual Engineering Sustainability Workshop on April 22, 2011. The focus of this year's workshop is energy.
- Council members will discuss what they want the Council to focus on next academic year during the meeting on May 5, 2011.

Adjourn: 1:00pm

VIII-3.10(C): University of Maryland, College Park Policies and Procedures for Environmentally Preferable Procurement

POLICY: The University of Maryland, College Park will procure all supplies, services, maintenance, construction and architect-engineer services in a manner consistent with the promotion of sound environmental stewardship and, in particular, promoting the reduction of carbon emissions as envisioned by the University's Climate Action Plan. Consideration of the environmental impact of products and services must be an integral part of the procurement process and should be weighed along with price and other factors when making procurement decisions.

PURPOSE: The purpose of these policies and procedures is to promote the principles of responsible environmental stewardship in the University's procurement practices. The University will employ strategies to encourage procurement of environmentally preferable goods and services including, but not limited to:

- Existing surplus property and materials for re-use
- > Energy efficient equipment and appliances
- > Renewable energy supplies
- > Energy performance contracts
- Environmentally sensitive design and construction of new and renovated facilities
- > Materials having recycled content
- ➤ Water saving equipment and appliances
- > Recyclable products
- Compostable materials
- > Non-hazardous materials
- ➤ Biodegradable products

AUTHORITY and DELEGATION: Procurement authority is derived from the University System of Maryland, Procurement Policies and Procedures. Further guidance is promulgated through University of Maryland, College Park Policy VIII-3.10 (A) University of Maryland, College Park Procurement Policies and Procedures and VIII-3.10 (B) University of Maryland, College Park Policies and Procedures for Delegated Procurement.

APPLICABILITY: The policies and procedures described herein shall be applicable to all procurements made by the University of Maryland, College Park via the Department of Procurement and Supply or by any other unit exercising delegated procurement authority under Policy VIII-3.10 (B).

PROCEDURES:

- **1. General:** All units of the University shall consider the policy objectives stated above when preparing specifications or developing statements of work, for procurement of goods and services.
- 2. Requesting Department/Unit Responsibilities: Specifications and statements of work prepared by Departments and units of the University for procurement under delegated authority or for forwarding to the Department of Procurement and Supply for procurement shall:
 - a. Procure general purpose office paper made from 100% postconsumer recycled content and seek solutions to minimize paper use. This section of the policy will be implemented as follows:
 - By January 1, 2012, phase out procurement of all general purpose office paper that does not contain at least 30% post-consumer recycled content.
 - ➤ By January 1, 2013, only general purpose office paper made from 100% post-consumer recycled content shall be procured.
 - Continuously seek solutions to minimize paper use, which may include:
 - Utilizing duplex (double-sided) printing
 - Increasing use of digital file management
 - Eliminating unnecessary printing
 - Using half-inch margins to fit more content on each sheet of paper.
 - a.b. Promote the procurement and use of the following, where available and within limitations of existing laws and regulations:
 - Post-consumer recycled-content paper products <u>from</u> Forest Stewardship Council (FSC) certified sources:
 - The University's goal is to procure 100% of its general purpose office paper from Forest Stewardship Council (FSC) certified sources, having a minimum of 30% post-consumer recycled material content.
 - Color office paper 30% post-consumer content
 - Note/writing pads 40% post-consumer content
 - Message pads 100% post-consumer content
 - Hanging file folders 95% post-consumer content
 - File folders 50% post-consumer content
 - Post-It notes 30% post-consumer content
 - Composition notebooks 100% post-consumer content
 - Other Rrecycled content and chlorine-free paper goods (letterhead, envelopes, business cards, etc.)

Comment [ms1]: From the Student Affairs Green Guide, March 2011

- Recycled content and process chlorine-free (PCF) paper towels and toilet tissue.
- Remanufactured toner cartridges and refillable ink cartridges (or toner cartridges made from recycled content material)
- Biodegradable and/or compostable food service packaging and service items
- ➤ Vegetable oil based inks
- > Recycled biosolids for use as mulch or compost
- > Energy efficient lighting fixtures and bulbs
- Energy-Star (or equal) rated appliances and equipment. Procurement of Energy Star (or equal) rated equipment and appliances is mandatory when such products are available
- > EPEAT certified green electronic equipment
- Carbon-neutral energy sources such as wind, solar, and nuclear energy
- Biodegradable-biobased, non-hazardous, and/or "Green Seal (or equal)" certified cleaning products
- ➤ Re-crushed/recycled concrete and asphalt materials
- Re-treaded tires and products made from recycled tire rubber
- Low noise emitting equipment and appliances
- ➤ Carpeting and flooring products which are manufactured from recycled-content materials and are recyclable
- Green furniture products containing materials from renewable sources or recycled-content
- ➤ Building products containing recycled material content
- Low (or no) VOC painting products, adhesives and solvents
- ➤ LEED Silver (or equal) or higher design standards for eligible new facilities and major renovations. Incorporation of sustainable design features to the maximum extent possible, on facilities projects not eligible for LEED.
- ➤ Low emission, fuel efficient vehicles
- Alternative fuels for use in vehicles: ethanol, biodiesel, CNG, electric and other fuel types as may become available and associated infrastructure
- > Local sources for goods and services
- **bc**. Discourage to the maximum extent feasible and within the limitation of existing laws and regulations, the procurement and use of:
 - ➤ Asbestos –containing materials
 - Mercury-containing materials

- Chlorofluorocarbons (CFCs)
- Hazardous substances requiring special handling and disposal
- > Polystyrene products and packaging
- Bleached, virgin paper with 0% post-consumer recycled content

<u>Procurement of these products for research purposes is an allowable exception to this policy.</u>

- ed. To the maximum extent possible, order available goods and services from Master Contracts established by the Department of Procurement and Supply.
- **3. Department of Procurement and Supply Responsibilities:** The Director of Procurement and Supply shall structure procurement procedures to:
 - a. Include a review of compliance with this policy as a part of regularly scheduled assistance visits for review of delegated procurement. Include in assistance visit reports, furnished to Deans, Directors, Department Heads and Vice Presidents (as applicable), comments regarding the extent of compliance and suggestions for improvement. Delegated procurement authority may be discontinued for failure to comply with this policy.
 - b. Review requisitions received from Departments and units of the University. Suggest environmentally preferable alternatives for consideration by the requestor.
 - c. Actively seek sources for environmentally preferable products. The Department shall identify and post links to appropriate search tools which may be of use to the campus community in identifying environmentally preferable product alternatives, such as the U.S. Environmental Protection Agency (EPA) database of environmentally preferable products at:

www.epa.gov/opptintr/epp/pubs/products/index.htm

d. Establish and actively promote the use of Master Contracts for environmentally preferable goods and services commonly used by the campus. Upon expiration of existing Master Contracts, consider opportunities for replacing them with more environmentally preferable options. All such Master Contract opportunities shall be posted on the Department of Procurement and Supply website, including specific instructions for ordering.

- e. Appoint one or more environmentally preferable procurement coordinators with responsibility for researching opportunities for environmentally preferable goods and services; issuing solicitations to establish contracts; and promoting the goods and services to the campus community. Establish an outreach and education program designed to inform the campus about the availability of such products and the benefits associated with their use.
- e. Encourage all vendors to offer environmentally preferable product promotions. Actively market these opportunities to the campus via the Department web-site, e-mail, and other venues likely to reach the campus community at-large.
- f. Actively promote the re-use of surplus personal property available at the Terrapin Trader as an alternative to procurement of new products.
- g. Aggressively seek multiple sources and promote competitive bidding for the environmentally preferable products specified by requesting Departments and units.
- h. Develop and implement the use of standard contract provisions promoting the policies established herein.

UM Green Office Program

Rationale

- Requests from across campus help us green our space
- Connect variety of campus initiatives into a cohesive umbrella program
 - EPP policy, Can the Can, DOTS green commuting, Energywi\$e
- Support and encourage sustainable practices
- Further integrate sustainability into campus culture
- Promote campus policies that promote sustainability



Goals of a green office program

- Conserve water, save energy, minimize waste and save money
- Recognize and reward leadership in sustainability
- Support the President's Climate Commitment and the University's Strategic Plan
- Further integrate sustainability into campus culture



Components of a green office program

- Office leader / coordinator
- Green practices Work through list mandatory, optional, innovation
- Goals Work towards a predetermined level of achievement
 - Level 1, Level 2, Level 3
 - Bronze, Silver, Gold
- Support materials, training/orientation, prompts, fact sheets, website/email
- Recognition certificate, award, website listing, electronic logo
- Time limited 1 year



Green Office Advisory Committee

Drew Carroll – SGA Administrative Affairs

Amy Coles – Department of Chemistry

Valerie Goubeau - DOTS

Allie Hall – Intercollegiate Athletics

Erika Heilig – Facilities Management

Jane Mulliken - Administrative Affairs

Pat Perfetto – Student Affairs

Stacey Pritchett, Department of Education

Other?



Examples





The Green Office website offers practical, Harvard-wide tips and resources for greening your office. Each of the resource conservation topics covered provides a quick overview of actions you may choose to take and a wide range of resources (fact sheets, PDF files, posters, etc.). Join the dozens of offices across Harvard who are Green Offices.

Get started today

Checklists by leaf





Leaf 2



Leaf 3





Leaf 4

Checklists by topic or impact location

Not quite ready to go for a Green Office leaf? Browse our lists of actions by topic. Remember each and every action counts and adds up quickly! It's just another easy way to get familiar with the Green Office program.



ENERGY



KITCHEN



PURCHASING









PUBLICATIONS



RECYCLING



WASTE REDUCTION

green office program

Green Office home Get Started

Checklists by Leaf

Leaf One

Leaf Two

Leaf Three

Leaf Fou

Checklists by Topic

Energy

Recycling

Waste Reduction

Publication

Events

Transportation

Kitchen

Purchasing

Participation

Green Office Program Resources

Harvard Green Offices

Presentations

Resources

Contact Green Office

Email Green Office



The USC Green Office Certification Program gives students, staff, and faculty members a framework for implementing sustainable practices in their workplaces. There are more than 20,000 staff and faculty members at USC and roughly 35,000 students. Thereby, the offices throughout the university represent an opportunity to make significant reductions in key areas including:

- 1. Green IT
- 2. Networking & Awareness
- 3. Recycling
- 4. Food & Beverage
- 5. Transportation
- 6. Energy Management
- 7. Office Supplies
- 8. Innovations

Based on the points that each office earns in each of the categories listed, offices are awarded a Green Office Certificate at one of four levels:

Bronze | Silver | Gold | Platinum

Certification levels are based on the percentage of points that an office receives out of the total points for which they are eligible. The certification ratings are as follows:

Bronze: 50% | Silver: 70% | Gold: 80% | Platinum: 90%

The next time you see a Green Office Seal or certificate around campus or on a department's website you will know that the office is taking steps to reduce its environmental impact by using sustainable products, managing their energy, commuting in an eco-friendly way, and more!

Email Join Now

Download the GHG Baseline Report: 2001-09



Join the Green Office Certification Program



Pomona College

About Pomona

Academics

Admissions

Administration

Life on Campus

News

Events

Sustainability











- Initiatives
- **Programs**
- Policies and Procedures
- **Tools and Resources**
- For Students
- For Faculty and Staff
 - Academic Projects
 - Bathroom and Kitchen
 - Computing and Printing
 - Getting Involved
 - Green Office Program
 - In Your Office
 - Purchasing
 - Reduce, Reuse, Recycle
- News
- About
- Sustainability Action Plan

Green Office Program

Want a quick glimpse of the program? Download the Calculator or this introductory guide [pdf].

What can you and your office do to reduce your environmental impacts? What are other offices doing?

The Green Office Program is designed to help offices implement sustainable practices into their workplaces. By making a few simple changes, offices can reduce their environmental footprint, help the College save money, meet the administration's sustainability goals and commitments, and respond to the overwhelming interest of students, faculty, staff, trustees and the surrounding community in sustainability. After completing actions suggested by the program, offices are assessed and receive one of four certifications levels. Certified offices can display their certification and will be recognized in campus publications.



Certified Offices

Office/Department	Certification Level	Contact	Report
ASPC	Level 2*	Ellie Ash	Download [pdf]
Computer Science	Level 4*	Lori Keala	Download [pdf]
Geology	Level 4*	Lori Keala	Download [pdf]
KSPC	Level 4*	Erica Tyron	Download [pdf]
Math	Level 3*	Kathy Sheldon	Download [pdf]
Registrar	Level 2	Jeannine Appel	Download [pdf]

Georget	OWN VERSITY est. 1789	Jo.		Search Site Index	Site Map Directory About			
Sustainability at Georgetown University								
Home	What We're Doing	What You Can Do	Teaching & Research	News & Events	Community Engagement			
	to the Georget		ffices Progran		ania 2011 Kicks Off at			

Gre

Georgetown's Green Offices pilot program, launched in January, 2011, invites our staff and faculty to join a simple, friendly competition between offices to go "green" - and, in doing so, help the University meet our sustainability goals.

The program provides a variety of simple actions that your office can implement to help conserve energy, reduce waste, and make more environmentally friendly purchases.

In recognition for your office's efforts, the Sustainability Office will certify qualifying offices as Hoya Green in 2011!

Find Out How Your Office Can Sign Up Today

Explore the links below to find out how your office can participate.

We hope to hear from you soon!

- Green Offices Certification Process
- Green Offices FAQ
- Green Offices Application / Green Actions Credit List
- Green Offices Tip Sheets Check back in March, 2011

Georgetown February 8, 2011 Bikeshare a Hit With Community

Kick Off & Staff Orientation

GEORGETOWN GREEN OFFICES 2011: GREEN ACTIONS CREDIT LIST * We hosted a Green Office Orientation to learn about the program and kick off our participation. Green Printing to Reduce Paper Consumption * We spent 8 minutes reviewing and discussing the tips to avoid printing at a recent staff meeting, and all We set the default on all capable office printers as double-sided. We always purchase paper with at least 50% post-consumer recycled content. Green Computing to Conserve Energy * We spent 8 minutes reviewing and discussing the tips for energy efficient computing at a recent staff meeting, and all office members pledge to reduce their workspace energy consumption. *It is our office policy to purchase or lease only Energy Star certified computers and office equipment. We have assessed our office network equipment to ensure that our system runs the minimum number of machines necessary (not extra). We have removed redundant, unnecessary equipment (e.g. extra printers). Recycling, Reusing, and Trash Disposal * We spent 8 minutes at a recent staff meeting reviewing and discussing the tips for recycling, and all office * Our office has the appropriate types of recycling bins in any common spaces (e.g. paper in copy rooms; all types in kitchen break rooms). We verified with our custodial manager that our bins are emptied correctly. We have a policy and process in our office to coordinate the recycling or reuse of special waste items, such as used electronics, batteries, cell phones, ink cartridges, furniture, and more (see Tips for complete list). Reducing Consumption* (Implement at least one from this category) Our office consolidates purchasing to only order what is needed, thus reducing truck deliveries and When replacing furniture or office equipment, first we check with the campus recycling office for lightly used supplies. If they don't have what we need, we request pre-owned or lightly used items from our vendor. Our office does not regularly purchase bottled or delivered drinking water for daily use. Instead, we offer

In our office kitchen or break room, we do not offer disposable cups and plates as standard practice. Instead, staff pledge to use reusable mugs, silverware, and dishes; and we have extra mugs and cups for guests!

UNIVERSITY OF CALIFORNIA, BERKELEY Office of Sustainability

Green Certifications

Sustainability Reports

Sustainability Plan

Talking Louder About

Bright Green News

Bright Green Questions and Answers



Green Certification Program

UC Berkeley Green Department and Green Event certification recognizes campus departments and events that have taken extra steps to be more sustainable. The program identifies a set of conditions and actions - some contion process is designed to optional and some required - that can be followed in order to be certified. The of provide resources, guidance, and recognition to faculty, staff, and students as

environmental impacts at work.

Green Department Certification

Green Department certification offers recognition and guidance in several area transportation, and purchasing. Departments are encouraged to contact the the certification process and to consult the Resource Guide for more informapage to learn more about the certified Green Departments.

As of November 10, 2010, departments seeking Green Department certifical version of the Checklist below. The points and pre-requisites identified here programs that any department can complete and implement. Innovation pc department-specific initiatives.

Green Department Checklist

odf Green Department Resource Guide

of Green Department Profiles

Green Event Certification

green department Checklist

Pre-requisites

- Department should have a Green Team with representatives from multiple areas of the
- Department uses 30% post consumer content copy paper for at least 90% of purchases.
- Department has well-labeled recycling bins for paper in all offices, copy rooms, and
- Department recycles all toner/printer cartridges.
- Department pledges to stay green and to offer training and information on their green

Energy and Climate

- There are no CRT monitors in use by the Department. (1 point)
- Department has conducted an appliance audit and eliminated any unnecessary personal refrigerators and other appliances OR there are no refrigerators older than 7 years in use by
- Department effectively utilizes power strips in break and conference rooms for electronic equipment with idle currents (1 point)
- Department turns off unattended computer monitors throughout the day and utilizes office
- Department utilizes power save modes on computers and copiers to power down to



GREEN WORKPLAC

About Us

Mission and History

Partners

Sustainability at Yale

Strategy

Who We Are

Certifications We Offer

- Green Event Certification
- Green Lab Certification
- Green Workplace

Green Workplac

The second application through March 23. If y register your workplachecklist. Please feel f

This program is designed practices in their workpl vitality, human health a items that reflect that th develop new, creative s

The program involves s procurement, kitchens

Yale Office of Sustainability			Point Allocation
	SOLID WASTE MANAGEMENT		
1	We host paperless staff meetings.		N/A
2	We rely on electronic communications and filing (instead of paper) for most systems and processes in our office.		N/A
3	Within the past 12 months, we have reviewed recycling procedures during a staff meeting.		N/A
4	We use and reuse inter-workplace envelopes instead of regular envelopes whenever feasible.		N/A
5	Within the past 12 months, we have reviewed the Yale Office of Environmental Health and Safety's universal waste disposal procedures which cover batteries, CFL's, and electronics.		N/A
6	We recycle all toner and print cartridges through OfficeMax.		N/A
7	We contact Yale SWAP or Traffic, Receiving and Stores about recycling furniture and workplace supplies that are no longer needed.		N/A
8	Double-sided printing is the default setting on all computers where this is an option.		N/A
9	We use rechargeable batteries (i.e. in cell phones, laptops, cameras, etc.) and recycle them through EHS universal waste recycling program.		N/A
10	We reduce unwanted mail by circulating periodicals and magazines, and encourage staff to remove their names from mailing lists. We also follow university junk mail procedures.		N/A
11	We dispose of defunct electronic equipment through Environmental Health and Safety.		N/A
	BONUS ACTIONS		
	We host a Pen Pail bin in our workplace to collect defunct writing implements.		N/A
	All reusable packing material is sent to the post office (for packing foam) to be recycled through Yale Recycling's Packing Material Take It or Leave It program, or is recycled internally.		N/A
	We have set quantitative goals for waste reduction, and have developed a strategy to achieve them.		N/A
		Total	0

int mail management

UNIVERSITY SUSTAINABILITY TOUR



terps leave **SMALL** footprints

top 4. Electrical-generating Exercise Equipment: Dixon Recreation Center

OSU's student recreation center elliptical trainers are connected of cutting edge inverter technology that harnesses power humans generate during their workouts. Since installation in Feb. 1009, the setup has garnered international attention as the largest of its kind in the world. With funding from students and the Energy Trust of Oregon, this revolutionary concept changes but relationship with a kilowatt hour, and educates users about the value of energy conservation at home, school or work.

Dixon Recreation
Center also uses
reen building maerials & techniques
including recycled
ubber flooring,
intural lighting,
ow-VOC materials,
iteat recovery venti-

ation, and more



ustainably-harvested wood products.

Off Campus Stop. Organic Ag: Organic Growers Club Farm. Directions and visit times can be found at the website below.

OSU's Organic Growers Club was started in 2001 by students oncerned with the impact of food production on human health and the environment. They empower students by contecting them to more sustainable food production. The Club shilosophy is that organic farming and gardening fosters one's ppreciation of a delicate environmental balance.

With the help and donations of many community members, the Club has been able to propagate starts in a greenhouse, grow rops and flowers on the farm, experiment with plot design, and optimize food quality and quantity while respecting the latural capacity of the land. During the growing season, the lub sells produce on campus.

All members of the OSU community are welcome to purchase produce, join the Club, or become volunteers. The club's webite is http://cropandsoil.oregonstate.edu/organic_grower

stop 5. Reuse and Recycling: OSUsed Store, 644 SW 13th St.

Best time to tour: 8-5 Mon., Tue., Thu., and Fri. Best time to hop: Wed. noon-3 PM, or first Wed. of the month 5:30-7:30 PM.

The OSUsed Store is operated by OSU Surplus Property and ells items no longer needed by campus departments. They arry a remarkable variety of items: vehicles, bicycles, comouters, laboratory equipment, furniture, and more. In addition to sales at the warehouse, surplus items are also sold through sealed bids, at live auctions and online at eBay.

While there, check out the recycling operations that also take place in the warehouse. Thanks to efforts by Campus Recycling and University Housing and Dining Services, OSU handily won the 2006 RecycleMania Classic national competition by recycling the most material per resident hall occupant.

For more information, check the Campus Recycling and OSU Surplus websites: http://recycle.oregonstate.edu and http://surplus.oregonstate.edu

Stop 6. Student Sustainability Center, 738 SW 15th Street

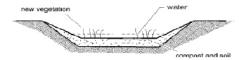
For hours, visit http://recycle.oregonstate.edu/ssi/

The Student Sustainability Center (SSC) is the hub of the student-powered sustainability movement on campus. A place for environmentally focused individuals and groups to meet and share information, the SSC also demonstrates sustainable practices in a residential or small office setting. The Student Sustainability Initiative operates from this location and provides student employment and sustainability grants for student-led campus projects. Permaculture, a Corvallis-OSU bicycle cooperative, and many other projects and events are based from this location. Solar resources and other larger projects are also planned for the Center. For more information, visit http://recycle.oregonstate.edu/ssi/

Stop 7. Stormwater Management and Stream Restoration: Bioswale behind Reser Stadium, along Oak Creek

Impermeable surfaces often increase volume and decrease quality of stormwater flowing into streams. Just south of the Reser Stadium parking lot, a bioswale is used for stormwater management.

A bioswale functions like a wetland. In the swale's gently sloping vegetated ditch, runoff is slowed and cleaned by biological methods, and silt settles out. Piping runoff to the swale from the paved lot minimizes surges in Oak Creek during storm events, releasing it



slowly to the creek as it would in an undisturbed setting.

Here and elsewhere on Oak Creek, projects are underway to maintain and improve the health of the stream: a dam was removed to return stream flow to normal; volunteers are removing invasive species from the riparian area; native plants restore and improve soil stability, stream shading, and habitat.

In June 2008, the Animal Sciences Dept. began a year-long project to create riparian buffers along more than 5 miles of streams on OSU livestock property, protecting 140 acres of wildlife habitat.

Stop 8. Urban Horticulture and Restoration: Oak Creek Center for Urban Horticulture

This site, located along Oak Creek, is tucked into a corner of campus once used to teach beekeeping. An interdisciplinary group of faculty, students and staff are working to restore the natural systems of the creek-side riparian corridor and create a space that will provide a forum for learning that integrates landscaping, green building technologies, community food systems, organic horticulture production, natural history, science, the arts, and cultural ecology. The site has a calm atmosphere that many find inspirational.

An OSU graduate student is performing research on green or 'eco' roofs on the site. These vegetated roofs can reduce storm water runoff, insulate buildings from heat and cold, reduce the urban heat island effect, increase the lifespan of the roof and increase biodiversity.

OSU Horticulture is seeking collaborative partners and grant funding to assist with the costs and implementation of the riparian restoration and program development.

If you'd like to be involved, contact John Lambrinos, Dept. of Horticulture, lambrini@hort.oregonstate.edu



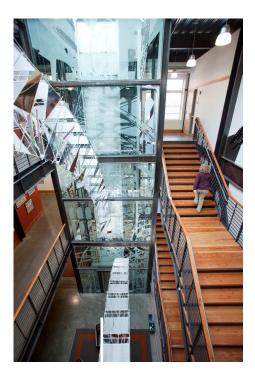
Stop 9. Reducing Greenhouse Gasses: Energy Center

Aging systems at the existing OSU steam plant have prompted officials to build a new plant. The new facility, however, will not only provide steam to heat campus buildings, but will offset some electrical consumption with efficient cogeneration technology.

Generating electricity produces heat. By making electricity on campus, "waste" heat can be utilized in campus buildings. Also, because of line losses typical of electrical transmission lines, additional efficiency is realized by locating electrical generators close to electrical consumers.

In addition to improved efficiency, plant systems will be capable of burning renewable fuels like biodiesel and methane gas. The building will be built to LEED Gold or Platinum green building standards, and harvest rainwater and solar energy. OSU Sustainability Office

Self-Guided Sustainability Tour



More information and an electronic version of this guide is available online: www.oregonstate.edu/sustainability

To obtain multiple copies of this publication, contact the OSU Sustainability Office: sustainability@oregonstate.edu

Jpdated July 2010



Oregon State University Self-Guided Campus Sustainability Tour

This brochure highlights some of the many ways OSU is working toward sustainability. "Tour stops" correspond to numbers on the map below. Most sites can be visited at any time but a few are best seen during the hours specified.

Throughout Campus & City: Efficient Transportation

Corvallis is one of only four communities nationwide rated "Gold" for bicycle friendliness by the League of American Bicyclists. At Stop 6, check out the Corvallis/OSU bicycle cooperative. And while Corvallis is nationally known as a bike-friendly community, it also has a good transit system.

community, it also has a good transit system.

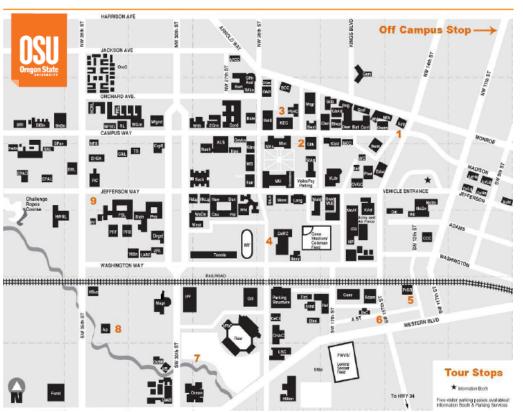
Corvallis Transit & OSU have teamed up to prepay for transit services so OSU commuters can conveniently get on board and avoid

single occupancy vehicles simply by showing OSU ID.

The OSU shuttle is free to all riders. To encourage pedestrian trips, the OSU Master Plan emphasizes higher density development to prevent campus sprawl and allow students to walk between classes in 10 minutes. An online rideshare system facilitates easier carpooling. At Stop 3, check out the bike lockers northwest of Kelley Engineering, east of Wilkinson Hall.

Several departments now rely on electric vehicles for transportation and delivery. Perfect for short stop-and-go trips, electric vehicles have no tailpipe emissions and use considerably less energy and money than their petroleum-powered counterparts.





Stop 1. Green Renovation and Green Building: Kearney Hall and other campus buildings

Originally built in 1899, Apperson Hall became the first engineering building on campus with the establishment of the Department of Civil Engineering in 1906. Apperson was remodeled and renamed Kearney Hall in 2008 to provide the Civil Engineering and Construction Engineering Management programs with state-of-the-art classrooms, offices and a 120 seat auditorium. The project aims to receive a LEED Gold rating by the US

Green Building Council.

The remodel left intact the building's familiar granite and sandstone exterior while completely remodeling the interior. Special green features include an interactive computer displaying real-time energy use of the building, upgraded thermal insulation, energy-efficient lighting, limited finishes on flooring, ceilings and walls, and exposed ceilings and "windows" into walls allowing students to view structural, mechanical



and electrical building elements. Wander the halls of Kearney for a lesson in green building engineering.

Similar to Keamey, the historic Weatherford Hall is a LEED certified renovation. Other LEED buildings include Kelley Engineering (Stop 3) and the Energy Center (Stop 9).

For more information on these and other green buildings and green building practices, please visit

www.oregonstate.edu/sustainability/greenbuilding

Stop 2. Preserving Green Space: Future Site of People's Park

The first OSU People's Park was an open space created in 1972 to honor student activists. An effort is underway to create a new park space that will continue these strong social and environmental connections.

With financial support from the Student Sustainability Initiative, a conceptual landscape plan (next page) was created based on student- and community-generated design principles and goals.

Principles and goals include creating a quieter contemplative space for use by small groups and individuals, encouraging diverse species of plants and animals (including pollinators and beneficial insects), introducing visitors to plants and materials that have a minimal lifecycle impact on the earth, and giving the park an identity and sense of place.



The Park project is seeking contributions to match new studen funds that will enable the Park's construction. For more information, visit oregonstate.edu/sustainability/donate.html

Stop 3. Green Building: Kelley Engineering Center

Certified Leadership in Energy and Environmental Design (LEED) "Gold", Kelley Engineering has many features com-

mon to green buildings, such as natural lighting and renewable materials.

Other green features:

- A 16,500 gallon rainwater collection system provides water to toilets throughout the building.
- A modular raised floor system allows air to circulate in occupants' workspaces, eliminating the energy required to move air from ceiling ducts to the occupied space.
 - d to cts
 d to use about 50% less electricity
- Building systems designed to use about 50% less electricity and 70% less water than required by code.
- Heat from a computer server room is ducted to cooler parts of the building in winter while cool air from outside is piped directly into the server room for natural cooling.
- A solar hot water system supplies much of the hot water needed for restrooms, kitchen areas, and bike room showers.

While at Kelley, be sure to see the bike lockers to the northwest, near Wilkinson Hall.

Existing Signage



UNIVERSITY SUSTAINABILITY DESIGN PROJECT



University Sustainability Tour



Food

1 Rooftop Community Garden Project 2 Public Health Student Teaching Garden



Energy

3 AV Williams Solar Array



Water

4 Sphagnum Moss Pool Treatment 5 Guilford Run Bioretention



Waste & Pollution

6 Center For Young Children



Transportation

7 Shuttle UM 8 Metro



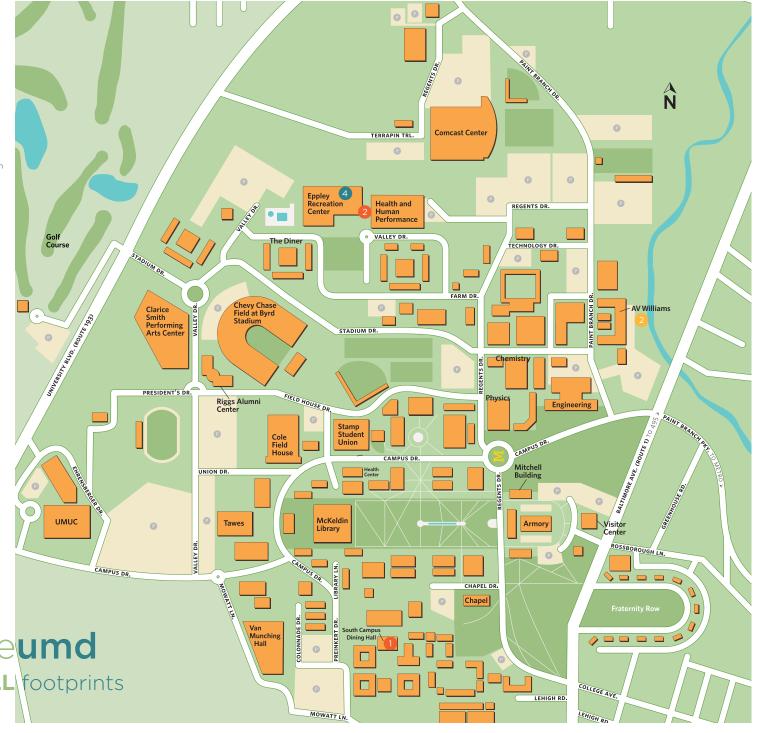
Ecosystem

9 WaterShed Constructed Wetland



sustainableumd

terps leave **SMALL** footprints



University Sustainability Tour



Food

1 Rooftop Community Garden Project 2 Public Health Student Teaching Garden



Energy

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Water

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Ecosystem

9 WaterShed Constructed Wetland



AUDIENCE THE UNIVERSITY OF MARYLAND SUSTAINABILITY DESIGN PROJECT

The University Sustainability Design Project integrates curriculm with practical application, transforming the university as "living laboratory" for both sustainability and design. The future of the campus and our world is our common design project.



- Students
- Staff
- Faculty
- Visitors
- Alumnae
- Community
- Nation
- Globe

EXAMPLE DESIGNS THE UNIVERSITY OF MARYLAND SUSTAINABILITY DESIGN PROJECT

The Merrill Center

PRESS 2 TO CONTINUE YOUR AUDIO TOUR

GIVING BACK

BUILDING AMENITIES

The Chesapeake Bay foundation has prided itself on its sustainable building. The building has been successful in using natural and recycled materials such as galvanized steel and cork. In fact, galvanized steel covers 95% of the buildings exterior. The cork used in the interior of the building was harvested from oak cork trees, involving a process which does not require killing trees to extract the material. If you notice, the large windows are not just aesthetically pleasing but act alongside our solar panels to heat and cool the building.

WHAT YOU CAN DO

Going green is cost effective and environmentally sound. Easy ways that you can be upon the environmentally conscious is to recycle your waste. Remember to unplug your appliances when they are not in use, and turn your thermostat down when you're not at home. Another good tip to lower your carbon footprint and lower your energy bills are to insulate your windows and doors.



www.cbf.org. It's how you know.

The construction of the Merrill Center was done with respect to its neighbors of all species. Continue to sign 5 to learn more about the Bay's native wildlife inhabitants!

- Themed Look and feel
 - Color consistency
 - Professional
 - Graphical
 - Information Design

Smart Parking

WHAT IS SMART PARKING?

Smart parking approaches try to minimize runoff, conserve energy, save natural habitats, reduce sprawl, and emphasize parking efficiency over supply. Significant progress toward these goals is being made at urban planning projects, and you can also employ the smart parking philosophy at home.

HOW TO PARK SMART AT HOME

- Recycle your used automotive chemicals at municipal sewage plants
- Build your garage with recycled materials like salvaged wood.
- Scrape snow off in the winter and check your tire air pressure to maximize fuel economy.
- Learn to live without the extra refrigerator in your garage.



www.cbf.org. It's how you know.

PRESS 2 TO CONTINUE YO

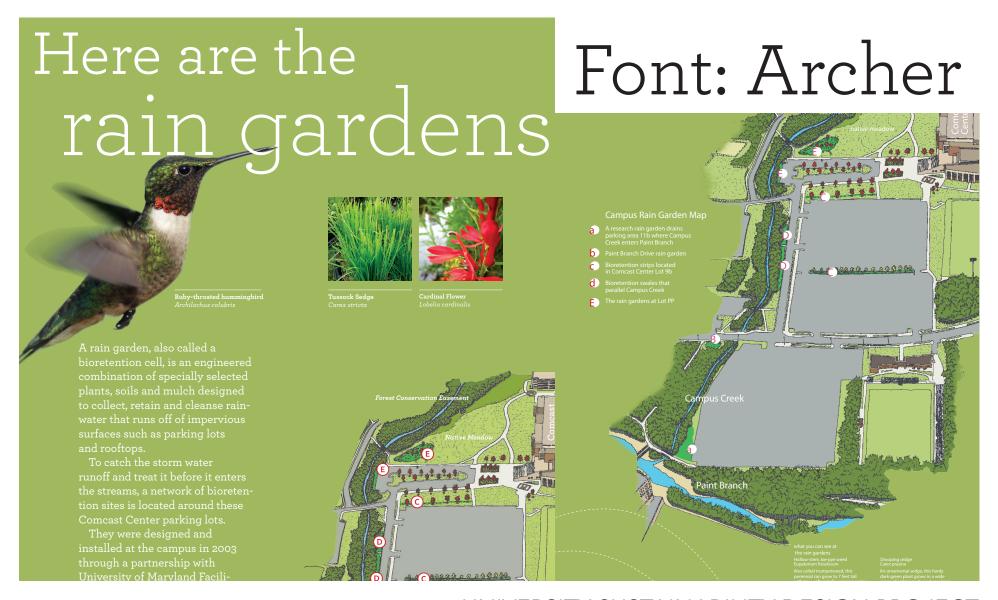
HOW WE PARK SMAR

- closest VIP spots for hybri building
- The gravel surface of our p runoff much more than cor
- Placing parking under the the total paved surface on a allowed us to cut down fev



Automobiles are just one of the containinating the Bay. Continu

Existing Designs



Watershed Constructed Wetlands







Suite 3115 Chesapeake Building University of Maryland College Park, MD 20742

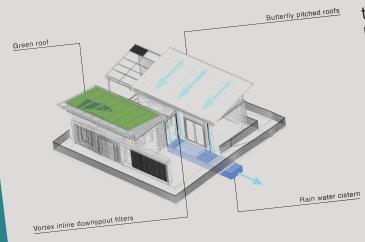
Please send your questions and sustainability@umd.edu

project

|water



The WaterShed Constructed Wetlands use nature as a mentor, pushing building technology beyond "net zero" energy consumption and producing more energy than it uses.



Constructed wetlands are artificial wetlands that can provide critical animal and plant habitat as well as being able to mitigate the impacts of point and non-point sources wastewater and stormwater runoff. Constructed wetlands reduce run-off and effectively remove sediments and pollutants from storm and wastewater that travel through their system. The treatment of wastewater or stormwater by constructed wetlands can be a low-cost, lowenergy process requiring minimal maintenance and operation.

Check out our zero energy wetlands!





project

[water]

phagnum Moss Water Treatment

Always connected.

Waste



Eco System



F.nergy

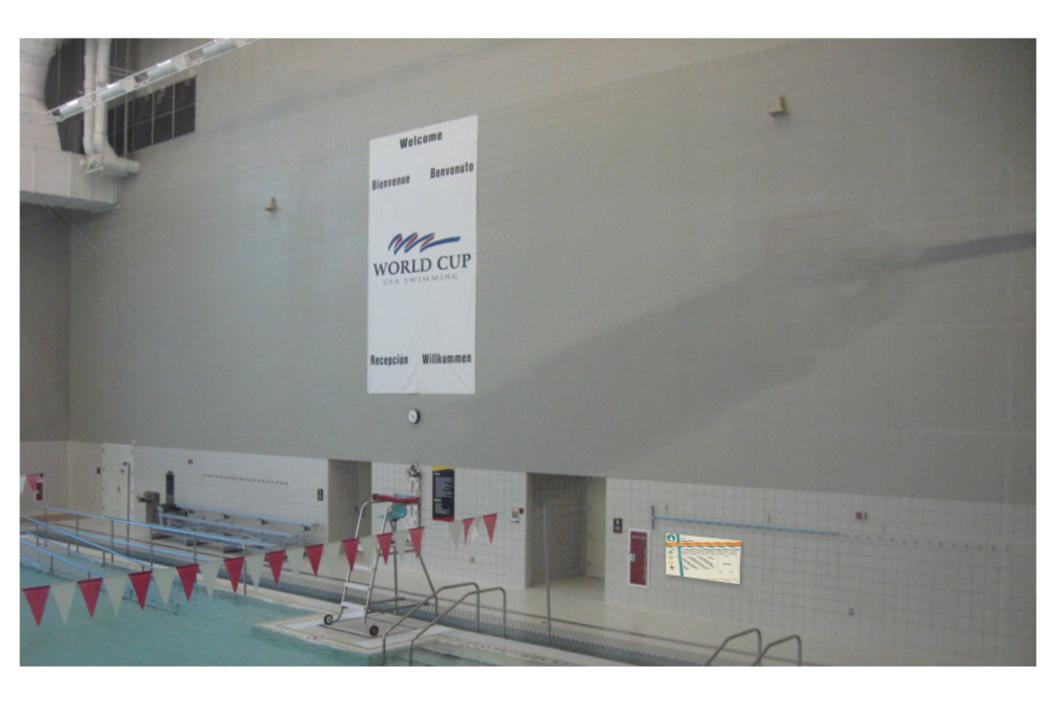


The Sphagnum Moss Swimming Pool Water Treatment System addresses environmental sustainability of the swimming pool facilities by reducing chemical usage and water consumption.

This project involves enhancing swimming pool water quality naturally by utilizing Sphagnum Moss. This moss-based water treatment system is a patented innovation that has proven results as a way to keep swimming pools clean while using fewer chemicals and reducing water consumption. The process models nature's ability to condition water by controlling the growth of microorganisms such as bacteria, algae, and other waterborne agents.

Pool Pic





UNIVERSITY SUSTAINABILITY DESIGN PROJECT





UMD sustainability

Young Terps Go Green! This project is focused on "greening" of the Center for Young Children at the University of Maryland Young children will derive benefits from sustainability and carry the knowledge into adulthood!

Always connected.







Suite 3115 Chesapeake Building University of Maryland College Park, MD 20742





Fundamental Understanding

Now!

Timely nteresting

Motivational

Environment!



- a. Habit forming "Green" behaviors Green Steps!
- b. Hands free water dispensers
- d. Reusable water bottles for each child c. Low flow toilets
- e. Reusable plates and dishes and real silverware
- f. Assessing usage of art materials g. Reducing usage of bathroom paper towels
- h. Touch-less paper towel dispensers
- i. Trash-free school environment
- k. Working with Dining Services to collect waste
- I.Eco-Educational materials for parents m. Video to present at local schools & conferences
- n. Interactive web site for young children on recycling

Come in to find out about the smallest carbon footprints! terps leave small footprints



Big strides. Small footprints.





















terps leave SMALL footprints

TERP STEP: SMALL FOOTPRINT, BIG IMPACT

BIG STRIDES, SMALL FOOTPRINTS