

## Recent Sustainability Actions & Plans for DePauw (updated December 2007)

### Leadership

DePauw has been making strides in energy conservation and other aspects of sustainability and reduction of its carbon footprint for a number of years. Leadership has come from student interns at the Compton Center for Peace and Justice, DePauw Progressive Network, DePauw Greens, and a campuswide recycling committee which has been at work for 15 years.

In Fall 2006 Dr. Bottoms appointed VPs Neal Abraham and Dick Speller and the new Director of Facilities, Ted Fares as a task force to find and implement energy conservation measures. They approved some immediate investments which result in savings that offset the costs in 1-2 years or less. They have agreed in principle that operating savings from such investments should be identified and those funds should be used for longer term investments with high conservation impact but slower returns on investment. They also formed a larger advisory group with interested students, faculty members, and other administrative staff members, working with previous separate student interest groups (such as on recycling).

In summer 2007 Dr. Bottoms and VPAA Abraham appointed Jennifer Everett, Assistant Professor of Philosophy, as part-time Sustainability Programs Coordinator. In Fall 2007 she formed a sustainability advisory group.

### Major activities (Fall 2007)

- September 2007 Field Trip to Ball State University Greening of the Campus conference with nine students and two staff
- Creation of sustainability website: <http://www.depauw.edu/univ/sustain.asp>.
- Organization of local participation in Focus the Nation climate change teach-in and public policy forum (<http://www.focusthenation.org>).
- Trainings and presentations for DePauw offices and organizations – Student Services Division, Office of Alumni Relations, Hartman House Civic Interns
- Public presentations on DePauw’s campus – e.g., Kiwanis Greencastle Chapter, Peace Camp, DePauw Discourse
- Coordination of student-led curricular and co-curricular sustainability projects involving local food, sustainable living, carbon footprint analysis, etc.

### Curricular offerings

Anthropology 253.	Environmental Anthropology (Darrell LaLone)
Biology 345.	Conservation Biology (Dana Dudle)
Chemistry 197.	First year Seminar: Green Chemistry (Jeff Hansen)
Economics 335.	Environmental and Natural Resource Economics (Michele Villinski)
Geology 197.	Modern Environmental Problems (Jeanette Pope)
Philosophy 209.	Environmental Ethics (Jennifer Everett)
Physics 110.	Physics for Poets (John Caraher)
Political Science 382.	Global Issues (Nafhat Nasr)
Univ. Studies 170.	Environmental Science Introductory Seminar (Jeanette Pope)

#### *Faculty development projects*

- DPU hosted the GLCA Environmental Studies Curriculum workshop in Fall 2006.
- Curricular and co-curricular sustainability internships visioning workshop held for faculty and staff in Summer 2007.
- Faculty development workshop: “Climate Change in Your Course” held November 2007.
- Sustainability reading group Fall 2007 on *Deep Economy: The Wealth of Communities and the Durable Future* by Bill McKibben; and *Heat: How to Stop the Planet Burning* by George Monbiot

### Electricity Conservation

- Tennis and Track Center Indoor Lighting  
Turning off 50% of the lights during non-competitive sports use saves \$12,000 annually.
- Surveyed the entire campus for light bulb and ballast replacement. Have replaced 1500 incandescent lights with compact fluorescent bulbs.  
Annual savings: \$13,230/year; 265,000 kW-hr per year
- The following buildings have had motion sensors installed that extinguish lights when no motion is detected: East College – Summer 2007; Prindle Institute – Summer 2007; Green Center for the Performing Arts – Summer 2007; Physical Plant offices – Summer 2007.

### **Water conservation**

- Chiller Plant Condenser water system replacement (2007)  
Water savings of 2.66 million gallons per year and \$13,845 annual savings
- Revised landscaping and plantings for reduced irrigation needs.
- Installed waterless urinals at the tennis and track center (2007)  
Annual saving \$229/urinal (total 4) and a total of 68,000 gallons of water annually

### **Other Energy Conservation Measures**

- Hogate Steam and Condensate Line; also Steam lines for south quad Olin/Julian/Peeler  
Replaced the leaking steam and condensate lines (cost \$540,000)  
Estimated savings of 100,000 gallons of water per year and \$3,500 in water, chemical treatment and heat loss for approximate annual savings of \$10,000.  
*Note: This project was not done for energy saving alone. It was completed due to the age of pipes (over 50 years). The pipe insulation had failed (dead grass) and the condensation pipe was riddled with holes.*
- Improved efficiency HVAC (VFD Variable Frequency Drives) units and more efficient lighting fixtures and ballasts are installed: Mason (summer 2006), Lucy (summer 2007); Performing Arts (summer 2007), 2008 Asbury Hall (All T-12 Incandescent bulbs and magnetic ballasts were changed to T-8 compact fluorescent and electronic ballasts)  
Savings: \$3,820/year 76,406 kW-hr per year

### **Recycling**

- Campuswide recycling committee efforts are over 15 years old.
- Compton Center for Peace and Justice student interns press initiatives to expand recycling efforts in Hogate Hall and Religious Life Center.
- Added 40 recycling containers on campus (2006-2007).
- Recycling volume has increased dramatically – (2006 averaging paper 3500 lb/month and co-mingled – glass, plastic, aluminum -- 1800 lb/month; in 2007 we are averaging 6200 lb/month and co-mingle is averaging 2700 lb/month)
- Recycling of computers – More than 1000 computers diverted from landfill through Community Technology Enhancement Program (CTEP) since 2002 which refurbishes used computers and printers and donates them to low-income families and nonprofit organizations (550) and ships unusable computers and peripherals to Indy-based prison-rehab-staffed green computer-disassembly/disposal center.
- Recycling bags provided for each student's sleeping room, purchased (2000 bags) and made them available as part of each dorm room's inventory.
- Mason hallway carpet was replaced using new product containing 60-70% post-consumer materials. Old carpeting was recycled saving 742 cubic yards of waste.

### **Dining Services**

- Established sale and use of a recyclable cup for hot and cold drinks beginning in Spring 2002 (have sold 1000 16 oz. hot cups and 400 20 oz. cold cups). Refills are sold at a discount and 15 cents on each mug is donated to the National Fish and Wildlife Foundation.
- Compostable cornstarch-based “Ecotainers” (rather than containers using petro-chemicals as a moisture barrier) for hot and cold beverages introduced Fall 2007.
- Fair trade coffee products introduced in 2002 on the initiative of interns at the Compton Center for Peace and Justice (Equal Exchange Coffee, Dallis Coffee and Starbucks, at different sites).
- Students from the Compton Center take leftover food (repackaged) to a local community center four evenings a week (began October 2007).
- Collaborate with Physical Plant since 2002 to recycle cardboard, plastic, glass, and metal.
- Walden Inn began to recycle through Dining Services beginning in Fall 2007.
- Waste reduction – steps taken to reduce excess food preparation.
- New program for dining service staff members distributes and encourages use of personal refillable coffee mugs given to them, beginning Fall 2007..
- Longden Hall Dining Center offers reusable washable materials (plates, silverware, glasses) beginning Fall 2006, students are offered the choice at the point of service.
- Dining Services has put an emphasis for all vendors to find and purchase more local food following initiatives of the Compton Center interns beginning in Spring 2006. Results include purchases from Scholar’s Inn Bakehouse, Prairie Farms Dairy, Klosterman’s Bakery, and Piazza produce.
- Recycle all used oils produced in dining halls. Collaboration with some chemistry projects to produce usable bio-diesel.
- Salt and Pepper dispenser use converting to re-fillable glass rather than disposable plastic.

### **Paper Use Reduction**

- Reduced paper use through increased use of electronic communication for contacts with students, parents, alumni.
- Introduction of print metering in Fall 2004 for students reduced printer waste by 20,000 pages/year.
- Campus Printers set to default of double-sided printing effective Fall 2007.
- Increased use of post-consumer use recycled paper products for printing (School of Music posters, brochures, ...)
- On-line University Catalog eliminates printing of 5000 copies annually (100,000 pages annually).
- On-line distribution of Schedule of Classes eliminates printing of 3500 copies each semester (28,000 pages annually).
- On-line Student Handbook reduces 3000 copies annually (60,000 pages)
- On-line Academic Handbook reduces 300 copies annually (30,000 pages)
- Reliable on-line data system reduces document printing in Registrar’s office
- On-line reports from Office of Institutional Research introduced in 2005 reduces 100’s of printed documents for distribution to the campus.
- On-line student advising records introduced in 2006 reduces printed materials for faculty advisors.
- On-line survey technologies reduces use of paper surveys
- On-line document server introduced in 2006 reduces 20,000 of pages of copies of committee documents and briefing materials for faculty development proposals, new course requests, new staffing requests, departmental self studies and strategic plans.
- On-line administration of student opinion surveys at the end of each semester and on-line reports (beginning Fall 2007 eliminates 25,000 pages of printing and copying per semester.

### **LEED (Green Building Council) Certification**

- Janet Prindle Institute for Ethics – designed for “LEED Certified” certification (total points certified 33; expected certification date: January 2008). Final decision to pursue LEED certification comes after strong expressions of concern by students (Compton Center interns), faculty members and staff members.
- Jim and Sue Bartlett Reflection Center – designed for “LEED Certified” certification (total points certified NA; expected certification date August 2008). LEED Certification pursued after strong advocacy from Compton Center interns.
- Next building – designed for “silver LEED certified” certification (total points certified NA; expected certification date October 2009)

### **Driving reductions**

- Street closing (closing College Street in summer 2001 reduced the number of students driving to academic buildings)
- Changes in parking regulations for students promotes leaving cars in peripheral parking lots except for off-campus trips.
- ArtsFest 2007 includes introduction of 100 University-funded “community bikes.” Environmental club and bike club committed to maintenance and repair of these bikes.
- Acquisition of more low consumption vehicles (facilities services purchases, increased use of golf carts or equivalent).
- Reduced frequency of campus mowing.

### **Other sustainability steps**

- “Green Housekeeping:” Custodial Department uses only “Green Products” (low environmental impact, biodegradable, more microfiber cloth wipes and less paper) effective February 2007. These staff members are all trained and certified. Also, green certified toilet paper is in use for the entire campus effective spring 2007.
- “Green Groundskeeping:” Composting of grounds yard waste – All leaves, clipping of shrubs and flowers are composted. (See also under driving reduction – use of low consumption vehicles, reduced mowing frequency; and see under water reduction – planting selection for reduced irrigation requirements.)

### **Data Center Consolidation -- Sustainability Highlights**

- Reduced from fifteen cabinets for electronics, hard drives and servers to six.
- Eliminated aging and inefficient hardware.
- Moved to newer, more efficient, standard HP servers.
- Moved to a more economical shared storage device.
- Moved to a more economical virtual server configuration.
- Overall reduction in power consumption and the load on the air conditioner by 70%.
- Expansion of Computer Science equipment absorbed without budget increase.
- Implemented “sustainable practices” for the future (including shared storage and virtualization)
- Installation of I-Light equipment absorbed without budget increase.

### **Student Engagement**

- Students at the Compton Center for Peace and Justice formed an Environmental Action Committee in 2001 -- suggests DePauw develop an environmental policy statement to include:
  - statement of environmental concern,
  - statement of University responsibility,
  - commitment to environmental education,
  - adoption of environmentally responsible purchasing policies,
  - maximization of energy conservation and efficiency,
  - reduction of solid waste through reuse and recycling, and
  - adoption of sustainable design principles in land-use, landscaping and building planning.
- Compton Center interns also take initiatives:
  - To expand recycling (2001)
  - To select Fair Trade coffee (2002)
  - To encourage purchase of local food (2006)
  - To encourage LEED certification of new buildings (2006)

### **Carbon Offset**

- Acquired the DePauw University Nature Park in 2003 and adjacent properties in 2003-2006. 520 acres (over 400 acres of woodland and prairie restoration) provides substantial carbon footprint offset through carbon sequestration in vegetation growth.

### **Programming for Greater Awareness**

August 2007	President Bottoms' opening convocation, "The Future is Watching"
September 2007	Distinguished visiting professor bell hooks, "Geographies of the Heart: the Politics of Location"
September 2007	Ralph Nader Ubben Lecture, "Don't Waste Your 20's"
September 2007	Boswell Symposium – Environmental Social Justice; Keynote Speaker Majora Carter, "Greening the Ghetto"
October 2007	DePauw Discourse – "Sustainability and Global Citizenship" featuring Bill McKibben and Robert F. Kennedy, Jr.
Oct-Nov 2007	ArtFest – "Art and the Environment" featuring launch of 100 community bikes and twig sculpture installation by Patrick Dougherty
November 2007	Environmental Social Justice Speaker Cheryl Johnson, "People for Community Recovery"
January 2008	Focus the Nation – nation-wide teach-in and policy forum on climate change, including roundtable discussion with Indiana political representatives
February 2008	DePauw Symposium on the Liberal Arts: "Liberal Education in the Age of Climate Change"

### **Discussions of sustainability with campus advisory boards and panels**

March 2007	Joint meeting of management, media, & science advisory boards
April 2007	Academic Affairs Committee of the Board of Trustees
September 2007	Parents Executive Committee (Student Life and Academic Life subgroup)
October 2007	Board of Trustee Spouses
November 2007	Board of Visitors