



## Campus Sustainability Update Issue

### RENEWABLE ENERGY



In 2001, Carnegie Mellon became the largest retail purchaser of wind power in the country. Since that time, more than 40 colleges and universities in Pennsylvania have committed to purchase wind power to meet at least a portion of their energy demand. For this initiative, Carnegie Mellon received the Governor's Award for Environmental Excellence and became a founding Green Power Partner and a recipient of a 2001 Green Power Leadership Award. In 2008, **21%** of the university's electricity will come from renewable or "green" sources, like wind energy, small hydropower, biomass and landfill gas.

In 2006, we contracted with our energy supplier to purchase "green gas" from a local landfill in

Johnstown, PA for the entire campus. Solar installations provide electricity on three of our buildings, Margaret Morrison IW, 407 S. Craig Street and the Solar Decathlon House. Also, 3 solar powered trash compactors are being used on campus.

Carnegie Mellon is collaborating with the City of Pittsburgh in the Clean Air - Cool Planet Pittsburgh Climate Protection initiative, which is a regional greenhouse gas inventory. In the spring of 2008, a class completed a carbon emissions inventory and environmental footprint and proposed specific recommendations for carbon emission reductions. CMU is represented on the ACORE Higher Education Steering Committee for American Council Renewable Energy (ACORE).



### GREEN BUILDINGS

The university's design guidelines requires that any construction or renovation projects be designed and constructed to achieve a LEED Silver rating at minimum. For the past year we have been applying this to projects over \$1 million. Currently there are four

LEED Silver-certified, one LEED-certified, and one LEED Gold-certified building on campus. One LEED project has been completed and is being evaluated by the USGBC (Carnegie Café), and four LEED projects are in design or under construction (Gregg Hall, GSIA, Doherty Hall Phase II, School of Computer Science). When Carnegie Mellon opened the Stever (New) House Residence Hall in the fall of 2003, we welcomed freshman into the **first green dormitory** in the country.

**Four green roof systems** have been installed on Porter Hall, Mellon Institute, Doherty Hall and Hamerschlag Hall. The university was a pilot partner in the EPA's Lab21 program for green design in laboratory facilities. The 2005 entry in the DOE solar decathlon house competition was permanently installed on campus and is used for conference space and as a demonstration of green design practices. The Robert L. Preger Intelligent Workplace built in 1996 continues to evolve as a living laboratory and research facility for new technologies. A **25kW Biodiesel** Engine-Generator with Heat Recovery provides electricity for the IW as well as thermal energy for a steam absorption chiller.

## Have You Heard...

### GREEN PRACTICES COMMITTEE

Since 1998, Carnegie Mellon has had a Green Practices Committee comprised of faculty, staff and students that meet monthly to coordinate sustainability efforts. Implementation policies for CO<sub>2</sub> reductions are directed by a steering sub-committee of upper level managers. A comprehensive campus Environmental Assessment was completed in spring 2005 and involved development of quantitative measures of environmental performance.

The document can be found on the Green Practices web site at [www.cmu.edu/greenpractices](http://www.cmu.edu/greenpractices).

### ALTERNATIVE FUEL VEHICLES

The campus operates **ten zero-emission** electric vehicles; Facilities Management Services uses these vehicles for transportation around the grounds. All campus shuttle buses run on **biodiesel fuel** and all police cars

purchased since 2006 are equipped to run on E-85 fuel. Public bus passes are provided to all students, faculty and staff. Special parking privileges are offered to carpool commuters through a carpool incentive program. We are active participants in the Bike Pittsburgh's Bike to Work program and the university also participates in the Zipcar program.

# CAMPUS SUSTAINABILITY



Parkhurst, the university's principle dining service makes purchases from over 30 local suppliers and farms and they currently use **cage free eggs, organic and fair trade coffees** at several eateries on campus. Organic produce and a long line of organic items can be found in Entropy +, our on-campus convenience store. They currently have an eatery on campus that is strictly for vegan and vegetarian diets which is open every day during the school year.



## FARMS TO CMU FOOD SUBSCRIPTION PROGRAM

The university sponsors and hosts a Community Supported Agriculture (**CSA**), Program which enables the campus community to receive fruit, vegetables, meat, dairy and baked goods from local farms, year round. Contact Isidore Foods for more information at [www.isidorefoods.com](http://www.isidorefoods.com).

## Take Action

### WHAT YOU CAN DO...

Turn off your monitors when not in use, turn off lights and unplug electrical devices when not in use. Try not to waste water. Try to use reusable bags for shopping and reusable moving storage containers or recycle your cardboard boxes. Purchase Energy Star rated electronic equipment. Recycle your bottles & cans, paper and everything else you can. Please use compact florescent bulbs and recycle them when they burn out.

### REDUCE, REUSE, RECYCLE AND RETHINK!

The university has a comprehensive recycling program, including paper, cardboard, plastic (1-5), glass & cans, scrap metal, carpet, electronics, kitchen grease, alkaline batteries, cell phones, ink jet, toner, printer cartridges and participates in the Nike Reuse-a-Shoe program. We participate in the national inter-collegiate contest **RecycleMania** and will again this Spring. The University Center kitchens will undertake a new initiative to **compost** all pre-consumer organics and food waste starting Fall 2008.

The university's current recycling rate, not including construction waste is **19%**. Our construction waste recycling program continues to expand, now covering all con-



struction projects of \$1 million and more. LEED Silver building projects divert about 85 – 100 percent of its construction waste. Campus Design is currently revising the University Guidelines so that every project diverts at least 50% of its construction waste that would have normally been sent to a landfill. We generally recycle all metals and carpet on projects, no matter what size.

### ENVIRONMENTAL EDUCATION AND RESEARCH

In 2006, Carnegie Mellon joined the Association for the Advancement of Sustainability in Higher Education (AASHE) and is attending the 2008 conference with students that will be presenting papers about sustainability initiatives and opportunities.

Environmental Education:

[www.cmu.edu/environment/](http://www.cmu.edu/environment/)

Steinbrenner Institute (SEER):

[www.cmu.edu/steinbrenner/](http://www.cmu.edu/steinbrenner/)

Green Practices:

[www.cmu.edu/greenpractices/](http://www.cmu.edu/greenpractices/)

City of Pittsburgh Recycling:

[www.city.pittsburgh.PA.US/PW/html/recycling.html](http://www.city.pittsburgh.PA.US/PW/html/recycling.html)

### ECO-REP PROGRAM

The Eco-Reps program was initiated in fall 2005. The goal of this peer-to-peer informal educational program is to help students become aware of their everyday lifestyle decisions and the effects an individual can have on the environment. For details contact M. Shernell Smith [mssmith@andrew.cmu.edu](mailto:mssmith@andrew.cmu.edu).

### SUSTAINABLE EARTH

Sustainable Earth is a student run environmental organization dedicated to improving environmental awareness and sustainability on campus. For more information about how to get involved email [sustain@andrew.cmu.edu](mailto:sustain@andrew.cmu.edu).