Carnegie Mellon

the green scene

A publication of the Environmental Practices Committee

Issue No. 2 **July 2001**

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CMU Commitment to Wind Power

Carnegie Mellon has announced that it will purchase 5% of its total electricity next year from wind power generated in Western Pennsylvania. This will make CMU the largest single retail purchaser of wind energy in the country, with a purchase of 4.8 million kWh/year!

By replacing 5% of the campus electricity load (currently supplied by a coal-fired power plant) with renewable wind energy, CMU will eliminate the production of 13 tons of NOx (nitrogen oxides), 35 tons of SO_2 (sulfur dioxide), 5,100 tons of CO_2 (carbon dioxide), and 0.18 pounds of mercury. The reduction in carbon dioxide emissions is equivalent to taking more than 1,000 cars off the road!

The wind energy will be generated by ten 1.5 megawatt wind turbines installed in Fayette County, PA, creating the current largest wind farm in the eastern U.S.

A task force has been created to pursue a 'University Challenge' to offset the additional cost of the wind power ($81,000) through campus energy use reduction savings! Look for details in the next 'green scene.'

For more information, contact Liz Munsch, Energy Manager at lizm@andrew.cmu.edu and see the article at www.cmu.edu/home/news/windpower.

Green Power Leadership Awards

The U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DOE), and the Center for Resource Solutions (CRS) have announced the winners for the 1st Annual Green Power Leadership Awards. Carnegie Mellon is one of six businesses and institutions (out of 18 nominees) who received an award by demonstrating significant impact and innovation as part of a green power purchase. Green power is defined as electricity generated from renewable sources, such as wind, solar (photovoltaic), or hydropower. The award seeks to recognize actions that significantly advance the development of renewable electricity sources, and help build a market for green power. For more information, see www.eren.doe.gov/greenpower.

Solar City Program

The City of Pittsburgh has declared an interest in participating in the international Solar City Program, a collaborative program of selected municipalities interested in integrating solar and other renewable forms of energy into urban life. Their goal is to achieve lower local and global levels of greenhouse gas emissions, and demonstrate less reliance on fossil fuels for energy production.

In conjunction with the city-wide effort, Carnegie Mellon will soon implement a CO_2 emissions target for the university. For more information, see the website at www.arc.cmu.edu/solarcity

In the Fall, two courses will be offered related to campus emissions reductions and renewable energy solutions.

'From Pittsburgh to Kyoto: How Far Can We Go? A CMU Perspective on Energy Use and Global Warming'
contacts: Edward Rubin, Professor, Engineering and Public Policy, rubin@andrew.cmu.edu
Baruch Fischhoff, Professor, Social and Decision Sciences, baruch@andrew.cmu.edu

'Powering the Campus of the Future'
contacts: Steve Lee, Professor, School of Architecture, stevelee@andrew.cmu.edu
Thomas Spiegelhalter, Professor, School of Architecture, thomas6@andrew.cmu.edu

EPA Online Greenhouse Gas Calculator

The EPA's new Personal Greenhouse Gas Calculator at http://www.epa.gov/globalwarming/tools/ghg_calc.html provides a fast, easy-to-use way to obtain a rough estimate of your household's annual greenhouse gas emissions from transportation, home energy use, and waste disposal. After you calculate your emissions, the calculator enables you to see how many pounds of carbon dioxide you could eliminate from your total by taking some cost-effective actions to reduce your impact on the environment.

Alternative Transportation

One way to reduce campus wide emissions of CO_2 is to find alternatives to driving to campus. Parking Services provides several environmentally-friendly options for commuting.

Bike locker rentals are available for anyone commuting to campus by bicycle. The steel lockers are large enough to store a bike, shoes, and helmet, and are located under the stadium adjacent to the parking garage, and also adjacent to the Facilties Management Building. The cost is $15 per semester ($45 a year including summer), which is considerably less than the cost of a parking permit. To rent a bike locker, contact Parking Services at 268-2052.

Another option is the Carpool Incentive Program (a carpool consists of 2 or more people who do not live on campus). Registered carpoolers may park in designated "preferred" parking spaces in campus lots and garages. In addition, the carpool leader receives a $5/month permit fee reduction, and the cost of the parking permit can be shared by everyone in the carpool! CMU also has a partnership with the University of Pittsburgh RideSharing Program. For more information on carpooling and vanpooling programs, contact Parking Services at 268-2052.

A third strategy for reducing the amount of cars driven to campus every day is the "Pay as you Park" Program for the East Campus Garage. Instead of purchasing a parking permit for the entire year and feeling obligated to drive every day, commuters may buy a daily permit on only those days that it is necessary to drive to campus. For more information, contact Parking Services at 268-2052.

And finally, the partnership between CMU and PAT allows benefits-eligible faculty and staff, and all students to ride the bus for free!

Recycling Awareness

The Carnegie Mellon Recycling Program is an important part of our environmental stewardship both locally and globally, and is a priority for the campus. Recycling containers for plastic, glass, paper, cardboard and other items are located throughout the campus, and items are routinely collected and picked up by recycling companies. It is important to note that recyclables are not sorted after they are collected, and if food waste is thrown in with recyclable items, the entire container is considered "contaminated" and must be thrown in the trash. Personal awareness is a large part of a successful recycling program for the entire campus. If you have concerns about a lack of recycling containers or items not being recycled, questions about where to recycle materials, or suggestions for improvement, please speak up!
Contact Barb Kviz, Environmental Coordinator at bk11@andrew.cmu.edu.

Dining Services Survey

Last semester, students in Professor Cliff Davidson's Introduction to Civil and Environmental Engineering class in the CEE Department, conducted a student survey of opinions on the environmental practices of Dining Services. 366 surveys were completed, answers were given on a scale from 1 to 5 (low importance to high), and the results were as follows.

- Students buy an average of 10.3 meals per week at CMU (not including lunch trucks).
- Concern for the amount of disposable material generated by food consumption ranked 3.0 on a scale of 1 to 5.
- Students were willing to pay an average of 23.4 cents more per meal to use biodegradable plates and utensils.
- Satisfaction with the locations of recycling containers ranked from 2.8 in academic buildings to 3.5 in the University Center.
- Satisfaction with CMU's recycling program was 2.9 for paper, 3.4 for cans and bottles, and 2.7 for other items like computers and furniture.
- Overall concern with environmental issues on campus ranked 3.1.

For a copy of the survey and complete results, contact Cliff Davidson at cliff@cmu.edu.

Three Rivers Environmental Awards

The 2001 Three Rivers Environmental Awards were held on May 29, 2001. Carnegie Mellon University had two nominees in the category of Higher Education. The purpose of the Three Rivers Environmental Awards is to celebrate the achievements of the finalists and the winners, while promoting innovative environmental accomplishments and enhancing the quality of life in Western Pennsylvania.

The first nomination was The Center for the Study and Improvement of Regulation (CSIR). CSIR applies a multidisciplinary approach to understanding and designing methods to improve environmental, health, and safety regulations. CSIR works at local, state, national and international levels, and has earned worldwide recognition as a leader in environmental improvements.

The second nomination was The Department of Engineering and Public Policy (EPP). EPP teaches students about the relationship between technology issues and environmental public policy in a complex society. The combination of technical issues and public policy questions makes this program unique, and the EPP Department has become a widely recognized resource in this field.
The Department of EPP won the award for Higher Education.

In addition, Mr. Charles Duritsa, long-time Director of the Southwestern Regional Office of the Pennsylvania Department of Environmental Protection, received the award in the Government category. Mr. Duritsa, who was nominated by Prof. David Dzombak, has made important contributions to environmental quality in our region and has also been a good friend to Carnegie Mellon by serving on advisory boards, providing student internships, and helping with research projects.

Newsletter

If you have comments, suggestions or items to be included in the next issue of the 'green scene,' please email them to Michelle Mondazzi, Editor at mmev@andrew.cmu.edu.
The 'green scene' is also available online at the EPC website (www.cmu.edu/epc).

Construction Junction

Construction Junction is Western Pennsylvania's first non-profit retail warehouse for surplus and used building materials. Carnegie Mellon has been working with Construction Junction to donate quality used materials from our campus renovation projects. To date we have donated movie screens, cabinets, office doors, table tops, drafting tables, a jig saw, steel beams, transom windows and hardware. Construction Junction accepts any materials that can be used to renovate, build or remodel a home or apartment building. If you are looking for good used materials for your next building project, or have materials to donate, visit the Construction Junction warehouse under the 62nd Street Bridge in Lawrenceville or call 412-799-0805 for more information.

Graduate Program Rankings

U.S. News and World Report magazine's 2002 issue of "America's Best Graduate Schools" has ranked some of CMU's environmentally focused programs with the nation's best.
The Heinz School ranked 10th in the category of Public Affairs Specialties: Environmental Policy & Management.
The environmental engineering program, encompassing faculty in CEE, EPP, ChE, and ME, ranked 17th in the category of Engineering Specialties: Environmental/ Environmental Health.
www.usnews.com/usnews/edu/beyond/bcrank.htm

Websites of Interest

CMU:
Environmental Practices Committee
www.cmu.edu/epc

EARTH
www.andrew.cmu.edu/org/earth/

Environmental Institute
www.envinst.cmu.edu

Green Design Initiative
http://gdi.ce.cmu.edu

Human Dimensions of Global Change
http://hdgc.epp.cmu.edu

Other Organizations:
National Wildlife Federation Campus Ecology
www.nwf.org/campusecology

EPA Global Warming Site
www.epa.gov/globalwarming