

Toward greener Catholic campuses

Rich Heffern | Nov. 18, 2009



Students from Loyola Marymount University and the University of California at Los Angeles form a giant "350" on the lawn of the Los Angeles Federal Building on Oct. 24, a day of international actions calling for substantive climate legislation. (Zak Cook)

A recent issue of *Sierra*, the bimonthly magazine of the Sierra Club, the nation's largest environmental organization, featured an article titled "My school's greener than your school." The article featured an "honor roll" of the nation's most environmentally savvy colleges and universities. The University of Colorado at Boulder led the pack, followed by other secular universities, such as the University of California at Berkeley and the University of Washington at Seattle. There were no Catholic campuses on the list.

But Catholic colleges and universities are joining their public counterparts in efforts at greening their campuses in a wide variety of ways.

About 24 have joined the Association for the Advancement of Sustainability in Higher Education, a resource organization that provides materials and techniques for promoting greener campuses.

Sustainability is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

The University of Notre Dame in Indiana opened an Office of Sustainability in May 2008 to monitor and develop the university's functions in the areas of power generation, food services, transportation, building and information technology.

Also Notre Dame hosted a conference in October called "Renewing the Campus: Sustainability and the Catholic University," which brought together 260 people from Catholic colleges and universities around the country.

Rachel Novik is outreach coordinator for Notre Dame's sustainability program. She said the conference's focus was on the connections between sustainability and Catholic theology and social teachings. "We had to turn people away."

Major efforts of Notre Dame's Sustainability Office concentrate on campus infrastructure and on other areas

such as food and recycling.

“For example, we have a goal of having twice as many recycle bins as trash cans on campus,” Novik said. “We have preferred parking spots for low-emission vehicles. We raise awareness among students, faculty and campus workers by fun and engaging competitions. With over 30 residence halls on campuses, dorms compete with each other to see who can use the least electricity, saving thousands of dollars a month on electricity. The College of Science challenged the administration building to see who could save the most electricity. We have a Green Summit every year attended by over 200 people, where we brainstorm about how to get better.”

The university adopted single-stream recycling, wherein glass, paper and plastic all can be recycled in one bin. The Sustainability Office continues to educate the university’s students, faculty and workers about the value of recycling.

“Before and after football games, students hand out bags and educate tailgaters about recycling,” Novik said.

Another area of sustainability work is water efficiency. The university replaced an antiquated sprinkler system with a new, high efficiency system that monitors the weather and automatically defers irrigation when it is raining. Flow meters are being installed that increase water savings up to 55 percent.

The university updated three student residence halls with water conservation technologies, including low-flow faucets and showerheads, waterless urinals and dual-flush toilets.

Following a baseline study that indicated Notre Dame was a bottom-half performer in energy usage per capita and per square foot, the university set out on multiyear energy conservation measures program. Technologies employed include efficient lighting, occupancy sensors and upgrading building controls to direct digital controls and linking to the university’s overall building automation system network.

For buildings that have digitally controlled heating and cooling, sensors maintain each room’s temperature between 70 and 75 degrees during occupied time, but allow it to fluctuate within that range. Allowing the temperature to fluctuate rather than trying to maintain an exact temperature reduces energy use by minimizing the use of mechanical systems.

Food is another area of activity. At Notre Dame there are two campus dining halls serving over 11,000 meals per day. Food service is the largest department, employing 253 full-time cooks, 1,023 part-time staff and 733 students.

“The primary food service measure is the percent of food served on campus that is locally sourced,” Novik said, which means it was grown and processed within Indiana or one of its neighboring states. “That’s 40 percent right now. Additionally, the coffee is fair trade purchase, leftover cooked food is donated to two homeless shelters, while edible food waste is processed through the university’s waste water conveyance system to the municipal wastewater treatment plant where solid wastes are removed and used in agricultural applications. Also, we were the first major university to receive certification from the Marine Stewardship Council, which establishes standards for not overfishing or destroying marine habitats.”

In university procurement, “we moved from 10 percent recycled paper to 80 percent and introduced paper reduction programs in campus offices.”

The Association for the Advancement of Sustainability in Higher Education is running a pilot program that rates and tracks how colleges and universities are making progress toward sustainability. Four Catholic institutions are part of the pilot.

One of them is Aquinas College in Grand Rapids, Mich. Rooted in the Dominican tradition, Aquinas features one of the country's first and only four-year undergraduate sustainable business program. The program is an outgrowth of the sustainable business concentration, which was developed in August 2003. Since February 2005, when the sustainable business program was established as its own department, the number of undergraduate majors has grown to nearly 50 students, placing it in the top of Aquinas' academic majors. Students undertake a rigorous course of study in sustainable business as well as three concentrated areas of coursework -- traditional science and business as well as environmental studies -- in addition to general education requirements.

Course offerings include industrial ecology, sustainable business management, sustainable energy systems, building social capital and others. The major was developed by Matt Tueth in consultation with a 13-person Sustainable Business External Advisory Committee involving area businesses and civic leaders, as well as the biology, chemistry and business departments of Aquinas. Tueth currently serves as chair of the department and Steelcase Foundation Professor of Sustainable Business.

Aquinas is also participating in a pilot project aimed at testing the feasibility of an urban organic waste management system in the city of Grand Rapids, participating in the development of an economically, socially and ecologically feasible composting system.

In the upper Midwest the College of St. Benedict in St. Joseph, Minn., and St. John's University in nearby Collegeville held a groundbreaking ceremony in October for a solar array consisting of 1,820 photovoltaic modules that will supply power on campus. The array will generate 575,000 kilowatts of power, according to Theo Eggermont, director of St. Benedict's sustainability office. "On sunny days this will furnish 20 percent of our power needs."

The college has state-of-the-art-energy management systems that control lighting, heating and ventilation of all buildings based on demand and occupancy. This heating, ventilation and air-conditioning equipment operation effectively saves energy on campus. Other recent efforts include a wind resource study on the feasibility of building a wind turbine for additional power supply, and a waste audit. "We wanted to know how much we threw away and how we could improve in this area," Eggermont said.

There is a shuttle service between the two campuses, which are seven miles apart. During the 2005-2006 academic year, 852,100 students were transported a total of 185,908 miles. At St. John's a new community building includes electricity metering and other sustainable building options that will qualify it for LEED (Leadership in Energy and Environmental Design) certification, according to Eggermont. LEED is a third-party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green building.

In 2007 both campuses were charter signatories to the President's Climate Commitment, a national commitment by a coalition of college and university presidents to become leaders in carbon-neutrality and combating climate change.

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