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## College of Lake County leading the way with its increasing green effort

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New water fountains, a geothermal energy system and solar panels are among the ways College of Lake County is showcasing increased efforts to go "green" that officials hope will benefit students and the community at large.

Scott Allen, an associate professor and a heating and air-conditioning engineering technology instructor, said CLC aims to be a leader in green technology use.

"We want to educate the community that this (renewable energy) is out there, this is possible," Allen said.

Going green is good in its own right, he added, so cost savings don't necessarily have to result from the effort.

CLC's two new drinking fountains are an example of an everyday piece of equipment being used to further the school's green message. The fountains are at the flagship Grayslake campus' primary entrance and the physical education building.

Along with a chiller and water filter, the fountains were built to accommodate filling reusable bottles, said Charlie Privett, the school's facilities manager.

What's creating buzz is a digital reader on the fountains indicating every plastic water bottle that wasn't produced because of each fill-up. Privett said one fountain's reader showed 316 water bottles were saved after a week of use.

"That's probably the thing we've had the most reaction to, all of it positive," Privett said.

On the academic side, heating and air-conditioning engineering technology pupils helped install a geothermal energy system at the Grayslake campus in February.

The \$23,000 system was installed with the idea of allowing heating and air-conditioning students train on the emerging technology.

The system is made up of a 900-foot, horizontal loop of sturdy plastic pipe buried on the technology building's north side. Once the pipe was routed through the structure's foundation about 6 feet deep, the students and a McHenry-based contractor connected it to a heat pump. Geothermal technology can heat and cool buildings by using the earth's presumably steady, underground temperature instead of common furnaces or air conditioning.



Jim Marison, left, overseer of solar systems at College of Lake County and Charlie Privett, facilities manager, stand by solar panels that are used to heat water for the building.

While CLC's technology building won't be warmed or cooled by the geothermal system, Allen said, the demonstration-only system was a smart investment for the training it'll provide to students. He said CLC will explore installing geothermal heating and cooling as part of infrastructure upgrades needed for aging buildings.

Allen, a 30-year heating and air conditioning veteran, said geothermal offers an opportunity to leave a smaller carbon footprint than with a natural gas-fueled boiler or furnace.

Privett said construction of a central geothermal heating and cooling plant at the Grayslake campus is on his "wish list."

Solar panels are another part of CLC's green initiative. Eight, 4-by-10-foot solar panels have been in use for about seven months atop roofs on the C Wing and physical education center.

Officials said the panels collect the sun's energy and distribute the heat to a 50-50 combination of antifreeze and water.

Liquid then goes from the roofs to a heat exchanger and pump in a maintenance room, said Jim Marison, supervisor of CLC's heating, ventilation and air-conditioning operations. CLC has been using the solar energy to heat a tank of water used for showers and bathrooms.

CLC bought the solar panels for \$47,000, roughly half the typical cost. It's estimated the college saved about \$700 on hot-water heating costs from September through February, but facilities director Ted Johnson said actual energy cost reductions can't be calculated until data is collected for a year.

Traditional lighting is also being moved aside. At CLC's Lakeshore campus in Waukegan, 20 light-emitting diode fixtures were installed in and around the student life center in what officials said was a continued move toward being energy efficient.

Privett and Marison said they believe CLC is near the head of the pack among community colleges when it comes to using green technology. Today's young students expect it, they said.

"They're more aware of what's going on," Privett said.