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Asheville, Buncombe schools become energy efficient, green

Changes will trim systems' budgets

By Nanci Bompey

It's never too late for a makeover.

Students returning to Asheville High School on Tuesday will see some major changes to the 91-year-old building.

There's a new heating and cooling system allowing rooms to be regulated individually, along with new ceilings making the building more energy efficient. About 300 windows were replaced, allowing teachers to bring fresh air and sunlight into classrooms. New energy efficient lights will help cut down on power bills.



Asheville City Schools spend nearly \$1 million a year in utilities at its 10 schools, with the city high school accounting for about 35 percent of that. A \$6 million renovation project that includes the improvements made this summer could save the high school thousands of dollars in energy costs.

"We are really protecting the legacy of the building but also bringing it into the 21st century," said Allen Johnson, superintendent of Asheville City Schools. "I think we have a responsibility to the children and the community to evaluate all opportunities."

Energy efficiency improvements like the one at Asheville High are taking place across the city and county, from installing solar panels to building sustainable playgrounds to upgrading bathrooms.

Evergreen Community Charter School is focused on creating a green campus. Buncombe County's two new intermediate schools will be LEED certified when they are completed next year.

In times of budget shortfalls, finding money to make improvements can be difficult. But a nearly \$500,000 grant from the U.S. Environmental Protection Agency will help Asheville City, Buncombe County and local charter schools implement even further reductions.

The EPA Climate Showcase Communities Grant is one of 25 projects funded across the nation to demonstrate innovative community-based projects that can achieve greenhouse gas reductions.

"I think if we do this well and this project is successful and it gets recognized, we'll have opportunities to do projects on a much larger and grander scale," Johnson said. "We are changing the culture ... It is part of educating the kids."

Grant to fund green projects

With the grant, project leaders hope to save 1,120 tons of greenhouse gas emissions and \$500,000 in utility costs over two years with retrofits to school buildings, including upgrading heating and cooling systems and replacing light bulbs.

An energy audit of the Asheville City Schools system found more than 60 low- or no-cost projects that could save the school system more than \$65,000 and save more than 880,000 tons of greenhouse gas emissions.

The school system has already installed switches designed to turn off phones and computers at night and further steps, like turning off the lights in vending machines could save the schools \$135 a year per machine.

Investments of about \$500,000 for all the recommended projects, including larger capital projects, could save the school system more than \$250,000 a year.

“I think they are doing a lot of things already, but it is not being done system wide,” said Linda Giltz, project manager for the grant at Land-of-Sky Regional Council. “By bringing the schools together and hearing what other people are doing, we hope there will be more efforts widespread throughout the school system and have more opportunities for more savings.”

Getting students involved

The money allows schools to set up green teams to involve students and teachers in finding ways to reduce greenhouse gases, from performing energy audits to improving recycling to using more local food in school cafeterias. Many schools already have these teams, but the money could help fund more projects.

“Part of this grant program is trying to do community outreach and make the community more aware of how to save energy,” said Ron Miller, of Waste Reduction Partners, which conducted the energy audit and is involved with giving out the grants. “If you really want something done in the community, get the kids involved.”

Francine Delany New School for Children may use its \$10,000 grant to install motion detectors for lights in hallways and bathrooms or purchase a school bus that runs on diesel fuel. Students will decide how the \$1,000 green team grant will be used, with each class coming up with ideas.

An energy audit last summer led the charter school to replace windows, get rid of personal refrigerators and turn computers off when they're not being used. The small school, with 15 staff and 138 students, spends more than \$20,000 in utilities every year.

The grant is “not just helping fund the actual projects but the cost that we save directly affects our budget,” said Buffy Fowler, operations coordinator. “With the budget cuts to the school, every little bit helps.”

Reading, Riding and Retrofit

The grant is one piece of the Reading, Riding and Retrofit project started by the Asheville-Buncombe HUB and the Asheville-Buncombe Sustainable Community Initiative last year.

The initiative encourages, promotes and supports environmental sustainability projects across all schools in Buncombe County.

Along with the EPA grant, the group is working with Land-of-Sky Regional Council to re-energize recycling efforts at schools in Buncombe, Henderson, Madison and Transylvania counties.

Former city Councilwoman Robin Cape is helping lead the Reading, Riding and Retrofit project, which she hopes will extend beyond replacing light bulbs to changing food systems, transportation and curriculums, and changing policies in the school systems.

“The schools touch everybody,” Cape said. “Schools are where kids today learn habits for the world they live in. Their whole worlds have to reflect what we are asking them to do.”

Additional Facts

Here's a look at some green projects taking place at city and county schools:

- **Charles D. Owen Middle School solar panels.** Science teachers led students in performing research for the application for Progress Energy's Sunsense Schools Competition and the Science Olympiad team made a video in support of the project.
- **Hall Fletcher Elementary School sustainable playground.** The school with the help of parents and neighborhood members plans to build a sustainable playground with a math, science and technology theme. It will include an outdoor classroom, sustainable technologies, a nature trail, rain garden and natural landscape that also help protect the nearby French Broad River.
- **Randolph Learning Center permaculture.** The school wants to become a center for applied green technologies. It is working with the Asheville Institute to design permaculture at the school.
- **Evergreen Community Charter School green campus.** The school teaches a green curriculum and also has many energy reduction practices including solar panels, a rain garden, energy-efficient lighting and green bathrooms.
- **North Buncombe Middle School peace garden.** Led by a teacher, the school had students design garden plots. It also held an Earth Day Green Night event.
- **SILSA sustainability project.** Led by a science teacher, SILSA students designed projects to save energy and build sustainability within the schools.