

your energy CONNECTION

a newsletter from the South Carolina Energy Office

Greening Education: Rethinking School Construction and the Environment

On April 10, the South Carolina Energy Office teamed up with the Palmetto State Clean Fuels Coalition (PSCFC) to host an alternative vehicle display for students at A.J. Whittenberg Elementary School in Greenville. The third and fourth grade students who attended the vehicle demonstration learned how vehicles powered by propane, natural gas, and electricity are able to improve the environment by reducing greenhouse gasses and dependence on fossil fuels. They even had a chance to "arrest" their favorite teacher, who was placed in the back of a propane-powered police cruiser!

A.J. Whittenberg, which opened in 2010, is the first elementary school in South Carolina with a school-wide engineering curriculum and the building's construction reflects the innovation that is incorporated into the daily learning environment. PSCFC stakeholders, who attended their quarterly meeting in conjunction with the vehicle display, were treated to a tour of the facility by its architect and school curriculum director Tom Roe.

A.J. Whittenberg is currently pursuing Leadership in Energy & Environmental Design (LEED) Certification based on its overall design and the use of the structure to teach students the importance of recycling, water conservation, and renewable resources. Mr. Roe explained that the school's LEED application has been delayed while further tests are done on lighting efficiency and noise pollution. To gain additional points toward certification, A.J. Whittenberg participates in the Green Steps Schools program. Green Steps Schools is an environmental education initiative that encourages individual schools in South Carolina to take annual sustainable steps toward becoming more environmentally responsible. The school has created a Green Team which monitors activities including recycling, gardening, composting, and the Breathe Better Air initiative which promotes an anti-idling environment around the school.

To learn more about A.J. Whittenberg and their engineering programs and curriculum, you can visit their website at: www.greenville.k12.sc.us/ajw/.



PSCFC stakeholders view the green roof and solar display (above left); SC Energy Office provides anti-idling signs for schools (above right); students listen to speakers discussing alternative vehicle technology (top right); A.J. Whittenberg teacher "arrested" during the vehicle display (bottom right)

SCED Calendar of Events

May 2013

- 2 **ASCEM 2013 Spring Conference**
Pine Island, Lake Murray
8:30 a.m.-3:30 p.m.
www.energy.sc.gov/calendar.aspx?id=710
- 14 **SC Local Government Energy Emergency Planning**
Midlands Technical College NE Campus
151 Powell Rd.
Columbia, SC
8:30 a.m.-4:00 p.m.
www.energy.sc.gov/calendar.aspx?id=712
- 15 **SC Local Government Energy Emergency Planning**
Trident Technical College Conference Center
7000 Rivers Ave.
North Charleston, SC
8:30 a.m.-4:00 p.m.
www.energy.sc.gov/calendar.aspx?id=713
- 22 **SC Solar Council**
Water Mission International
1150 Kinzer Street
North Charleston, SC
11:00 a.m.-3:00 p.m.
To register, contact Sara at 803-256-0670

SC Local Government Energy Emergency Planning

The South Carolina Energy Office (SCEO) is hosting free, one-day workshops where you will learn how to be prepared BEFORE an energy emergency and ensure that your essential operations can continue despite a power outage or loss of access to transportation fuel. This is a critical issue facing governments, especially in the face of increasing events such as hurricanes, flooding, and security vulnerabilities in energy systems. Post-workshop tools will include information on how to find the resources to fill gaps in your existing infrastructure.

A survey of local governments in South Carolina showed that most had an emergency preparedness plan, but few plans incorporated energy-specific issues. Hurricane Sandy is just the most recent event that reminds us of the importance of planning for energy and fuel-related disruptions.

Get the tools and training you need to strengthen your emergency plan and procedures by incorporating lessons learned from recent hurricanes and other events that disrupted fuel and energy supplies. Address issues such as ensuring fuel for your emergency vehicles is available if gas pumps lose electricity or allocating staff time to monitoring potential disruptions related to gasoline shortages. Learn from a local government case study presented by the Town of Wilmington, NC.

The workshops will be held in Columbia on May 14th and in North Charleston on May 15th. For more information, visit the SCEO Calendar at www.energy.sc.gov/calendar.

**To register contact Jennifer Satterthwaite
803-737-0411
jsatterthwaite@energy.sc.gov**

During Hurricane Sandy 18 of 19 fuel terminals in NJ were closed

Fewer than 25% of franchised service stations were open

Local police occasionally had to maintain order as people waited in line for fuel

WORKSHOP MATERIALS

As an attendee, you will receive:

- Pre-workshop materials that will help you assemble basic information about your community's energy supply and use;
- Instruction on the essential components of an Energy Assurance Plan;
- An Energy Assurance Plan workbook; and
- Post-workshop action items to complete the Energy Assurance Plan.

South Carolina School Success Stories: Rock Hill

Schools and state agencies in South Carolina's forty-six counties are experiencing increased energy savings after receiving funds from the 2009 American Recovery and Reinvestment (stimulus) Act. The South Carolina Energy Office administered the stimulus funds to schools, colleges, and state agencies as State Energy Program (SEP) grants and loans.

Most of the state's school districts used the stimulus funds for energy efficiency upgrades. Rock Hill schools lead the state in the number of campuses certified by Energy Star, a seal of approval signifying they're among the most energy-efficient facilities of their size in the country. Of the 25 South Carolina schools that have earned the Energy Star designation, 13 are in Rock Hill. District officials credit the push to Joan Smith, the district's former energy manager. Smith was hired to monitor power usage and work with teachers, principals, and other staff to curb waste. She used software to assess how much energy the district was using and helped teachers spot waste and craft conservation plans. Between

January and December 2011, school officials estimate they saved \$1.1 million across the District's facilities.

The District in recent years has replaced older light fixtures with energy efficient ones and classrooms now have motion sensors that shut off lights when they are empty. Smith met with teachers and principals to lay out plans and offer tips. Each school got a "shut-down list" for weekdays and one for weekends and holidays, which detail what should be turned off before everyone leaves for the day. Schools have teams of students who make daily rounds shutting things down.

"It's just raised our consciousness," South Pointe High Principal Al Leonard said. "I'm looking at it from an angle I've never looked at it from before." Smith visited campuses after hours to see what was left on. For each classroom that had a perfect score on the "shut-down list", Smith would leave a red, apple-shaped note, a kudo with the teacher's name on it that was entered in a drawing for prizes, such as a weekend getaway in the mountains. Smith now works for Harris Integrated Solutions as an Energy Solutions Consultant.