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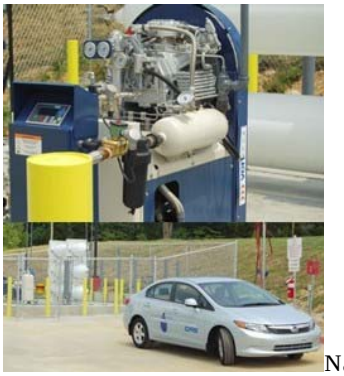
One of the First Natural Gas Fueling Stations in Kentucky Opens in Somerset

The City of Somerset has announced the opening of its new Natural Gas Fuel Center, the first in Kentucky to offer the public, upon request, compressed natural gas for vehicle use. The fuel center is located off Clifty Road on Chappell Dairy Road.



Natural gas powered vehicles face a shortage of fueling stations, which creates a major problem for wider use of natural gas as a fuel. When Somerset took delivery of its first natural gas-powered Honda Civic, city officials had to take it to Wartburg, Tennessee for a fill-up, but the new Somerset fuel center will save the city time and money. Vehicles powered by compressed natural gas are more environmentally friendly and provide a real savings at the pump.

“I drove a Honda Civic to Louisville on less than $10 worth of natural gas,” Somerset Mayor Eddie Girdler noted. A full cylinder of compressed natural gas at about $1.50 per gallon will power a Honda Civic between 250 and 300 miles. The Honda Civic gets about 37 mph and performs exactly as a gasoline-powered car.

Somerset is replacing its 75-vehicle fleet with cars and trucks that use compressed natural gas. At last report the city has three Honda Civic cars and two F-150 Ford pickups, all of which use compressed natural gas. The city has also purchased a new compressed natural gas sanitation truck to replace one of its large garbage collection vehicles.

Consumer Energy Center, a division of California Energy Commission, says natural gas powers more than 12 million vehicles around the world, but only about 250,000 are in the United States. However, the number of natural gas-powered vehicles in the United States has been increasing by 3.7 percent each

year.

Girdler expects between 200 and 300 cars to fill up their natural gas-powered vehicles at the new facility each day. “These are new people coming to Somerset that will eat at our restaurants and shop in our stores,” the mayor said. He expects Somerset to be a focal point for supplies of compressed natural gas until similar facilities are developed along interstate highways sometime in the future. Read the original article at the Commonwealth Journal.

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Conn Center to Sponsor Renewable Energy & Energy Efficiency Workshop

The University of Louisville's Conn Center for Renewable Energy Research is sponsoring the 2013 *Kentucky Statewide Workshop: Renewable Energy & Energy Efficiency* on March 24 - 26, 2013. The workshop will be held in downtown Louisville and will feature top researchers from Kentucky universities and industries who will discuss the latest developments and challenges in renewable energy and energy efficiency technologies. The workshop will cover current research from across the state and hold discussions focused on a technological road map for commercialization of various renewable energy innovations in Kentucky.

Call for Papers & Student Posters -- Papers are invited on recent fundamental discoveries that can significantly further the science and technology of renewable energy and energy efficiency research. Papers are also invited that address the goal of implementing such technologies across Kentucky. Students are encouraged to participate in this workshop and the scientifically judged poster competition.

The workshop will highlight five themes:

- Energy Storage
- Biomass/Biofuels
- Advanced Energy Materials
- Efficiency & Conservation
- Solar

Information on costs, registration and paper and poster submissions can be found on the Conn Center website.

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USDA Announces Investments in Bioenergy Research and Development

Agriculture Secretary Tom Vilsack visited a state-of-the-art bioindustrial facility at Renmatix on January 11, where he announced $25 million to fund research and development of next-generation renewable energy and high-value biobased products from a variety of biomass sources.

Secretary Vilsack said, "The advances made through this research will help to boost local economies throughout rural America, creating and sustaining good-paying jobs, while moving our nation toward a clean energy economy."

The projects are funded by USDA's National Institute of Food and Agriculture (NIFA) through the Biomass Research and Development Initiative, established in the 2008 Farm Bill. The funded research will help increase the availability of alternative renewable fuels and biobased products to diversify the nation's energy

resources. The Department of Energy will make additional awards through this program. Each award was made through a competitive selection process.

The following projects have been selected for awards:

- Kansas State University, Manhattan, Kan., $5,078,932. The goal of this project is to make the oilseed crop camelina a cost-effective biofuel and bioproduct feedstock.
- Ohio State University, Wooster, Ohio, $6,510,183. This project will result in an anaerobic digestion system for the production of liquid transportation fuels and electricity from animal manure, agricultural residues, woody biomass and energy crops.
- Ceramatec, Inc., Salt Lake City, Utah, $6,599,304. This project will convert lignocellulosic biomass to infrastructure-compatible renewable diesel, biolubricants, animal feed and biopower.
- USDA-Agricultural Research Service, Eastern Regional Research Center, Wyndmoor, Pa., $6,865,942. ARS scientists will develop an on-the-farm distributed technology for converting forest residues, horse manure, switchgrass and other perennial grasses into biofuels and high-value specialty chemicals.

USDA is working to develop the biofuels industry in every region of the country. In addition to these awards, USDA has previously announced major support for public and private research in renewable energy and products in every major American region, aimed at developing renewable energy markets, generating rural jobs, and decreasing America's dependence on foreign oil. By partnering with industry, the research is enabling private-sector partners to produce advanced ready-to-use liquid transportation and aviation biofuels.

In addition, USDA is helping companies build biorefineries—including the first ever commercial-scale cellulosic ethanol facilities—and supporting farmers, ranchers and businesses taking risks to pursue new opportunities in biofuels. More than 130 biodiesel and ethanol projects funded by USDA are currently producing almost 3.7 billion gallons of biodiesel and ethanol annually, enough fuel—in equivalence to gasoline—to keep five million vehicles on the road every year.

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Financing Clean Energy Through Crowdfunding

What is crowdfunding? Crowdfunding is the collective effort of individuals who network and pool their money, usually via the Internet, to support or invest in efforts initiated by other people or organizations. Clean energy, especially solar, is a natural for crowdfunding.

One new online marketplace for crowdfunding is *Solar Mosaic* and it promises to

provide a transparent and democratic new way of financing clean energy. As funded solar projects earn revenue, investors are paid back with interest.

Solar Mosaic describes itself as "an online marketplace that connects investors to high-quality solar projects, offering investments to residents of California and New York as well as accredited investors from around the country. For the first time ever, the American public will be able to invest directly into clean energy projects and receive a solid return."

Investing in energy has traditionally been for banks and large investors only - but crowdfunding could provide a real opportunity for small investors to have an

impact on how clean energy projects are funded in the U.S. and around the world.

Read the entire article and find many more links to crowdfunding information and opportunities at Clean Technica.

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Renewable Energy Tax Credits Extended

From U.S. DOE Office of Energy Efficiency and Renewable Energy

The Production Tax Credit (PTC) and the investment tax credits will be extended through the end of the year under the American Taxpayer Relief Act of 2012, which was passed by Congress on January 1, 2013, and signed into law on January 2 by President Obama. The extension of the PTC, included in the bill to avert the so-called "fiscal cliff," would apply to all U.S. wind projects that start construction in 2013. In addition to the PTC, the law also covers investment tax credits for community and offshore wind projects.

The American Wind Energy Association (AWEA) said the incentives will allow continued growth for wind energy. Last year, the amount of wind energy installed in the United States comprised a record-setting 44 percent of all new U.S. electrical generating capacity, according to the Energy Information Administration and AWEA.

The law also includes geothermal, biomass and hydropower tax credits as well as a range of other energy efficiency and renewable energy credits. For example, the law extends the biodiesel tax incentive for 2012 and 2013, which expired on December 31, 2011. The $1-per-gallon biodiesel tax incentive was first implemented in 2005. According to a study conducted by Cardno ENTRIX, a consulting firm, the biofuel industry would support more than 112,000 jobs nationally in 2013 with the tax credit in place versus nearly 82,000 without it.

The measure also provides one-year tax credits for energy-efficient additions such as exterior windows, doors and skylights which are eligible for the non-business energy property tax credit; alternative-fuel-vehicle refueling stations; a $2,500 tax credit for two-wheeled or three-wheeled plug-in electric vehicles; and construction of energy-efficient new homes and the purchase of energy-efficient appliances.

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Net-Zero Means Net Savings

From the Independent Online

When it was completed a few years ago, Richardsville Elementary School, located in a small Warren County community near Bowling Green, was officially designated as the first “net-zero school” in Kentucky, but claims by the building’s designers and school officials that the school would actually produce more energy than it used had more than a few doubters.

And why not? After all, the then-new $12.1 million school housing 550 students had 777,266 square feet of space to heat and cool. How could it possibly do that without costing the Warren County School District thousands of dollars a year?

Well, the building’s designers were not just blowing hot air when they bragged about how efficient the school would be. If anything, the school has exceeded its expectations, and in so doing, it has established a precedent that other school districts are eager to follow.

Not only did Richardsville Elementary not cost the school district a penny to heat or cool in 2012, but the Tennessee Valley Authority paid the Warren County district a little more than $37,000 for the electricity produced by Richardsville Elementary.

Read the entire article at the Independent Online.

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Submit an Article to REnews!

KREC would like to publish your thoughts on renewable energy and energy efficiency in Kentucky in the "Members' Forum". Please send your opinions, articles or news about RE happenings in the Commonwealth to KREC@kppc.org. A short piece is preferable (300 or fewer words work best).

Make your voice heard – we want to give KREC members a forum to spread the word about renewable energy efforts and issues.

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