

Kentucky Energy Watch

Department for Energy Development and Independence

A snapshot of state and national energy issues



Net zero schools in Kentucky: models for the future come from surprising places

This week, I asked a close friend to guess which state boasted the nation's first net zero public elementary school. "California?" he ventured. "Vermont?" "Massachusetts?" No, no, and no. How about Kentucky, the nation's third largest coal producer, with \$5 bn in annual coal revenues and the nation's fourth lowest electricity costs (at just over 7 cents per kilowatt-hour)? Almost everybody thinks about ambitious energy policy as coming from the right or left coasts, where avoided costs are higher and environmental fervor is often stronger. You only have to look at the location of Prius ownership to see that bias reflected. But if you have been paying attention to the Kentucky Governor Steve Beshear's energy plan, "Intelligent Energy Choices for Kentucky's Future," you might have guessed that the first net zero elementary school would be claimed by the Bluegrass State. It is a very ambitious strategy, and includes seven specific goals to be reached by the year 2025. (Forbes – Dec. 10, 2012)

Not just patriotic, U.S. manufacturing may be smart

The advantages to making products in the U.S. are starting to stack up — and companies are taking notice. Among them are Apple, which announced Thursday it plans to start producing some of its Mac computers here instead of in China, and General Electric, which is making big investments at home. It's not just a matter of publicity, either. As the December issue of *The Atlantic* reports, companies are seeing real economic advantages to "in-sourcing," a reversal of the outsourcing trends that sent U.S. manufacturing overseas. General Electric opened Appliance Park in Louisville, Ky., in 1951, but lately it has been making some changes there. In August, the company announced an \$800 million investment in jobs, products and the manufacturing process itself. Back in 2008, Rich Calvaruso gathered his team at Appliance Park and told them they had to rethink the dishwasher. (NPR – Dec. 8, 2012)

Partnership produces ethanol from sweet sorghum in Kentucky

Delta BioRenewables LLC, a sustainable feedstock producer and bioenergy project developer, has announced that its collaboration partner Commonwealth Agri-Energy LLC has successfully produced ethanol from sweet sorghum sugars at its corn ethanol facility in Hopkinsville, Ky. The industrial-scale evaluation, which utilized fermentable sugars from improved sweet sorghum hybrids developed by Ceres Inc., marks the first step in demonstrating the commercial viability of integrating the new feedstock into existing domestic corn ethanol facilities. Sweet sorghum is on the pathway for acceptance as an advanced biofuel feedstock under the Renewable Fuel Standard, thus providing an additional financial incentive for corn ethanol facilities to adopt the crop. Sweet sorghum is a drought-tolerant, low input crop, well adapted to most regions of the United States. It serves as a companion crop to corn and soybeans in an annual crop rotation system. (Ethanol Producer Magazine – Dec. 11, 2012)

Unique boiler helping Kentucky producer save on energy bill

As the temperatures drop, many people are wondering how they can reduce winter energy costs, and one Hart County producer may have it figured out. Paul Dennison, a grower of various horticultural crops and tobacco in Horse Cave, Ky., hopes to eliminate an energy bill this winter after installing a biomass gasification boiler this past spring at his farming operation. "If this thing is as efficient as I'm hoping, we won't have to buy any more propane," he said. Dennison installed the boiler with the help of Chris Clark, Hart County agriculture and natural resources agent with the University of Kentucky Cooperative Extension Service. Clark connected Dennison with personnel in the UK Department of Biosystems and Agricultural Engineering, who were conducting on-farm energy audits for farmers as part of a grant the UK Cooperative Extension Service received from the U.S. Department of Agriculture. The audit helped Dennison determine whether the boiler might be more efficient than his current heat source, propane. The audit also helped him secure partial funding for the project from the Governor's Office of Agricultural Policy's On-Farm Energy Efficiency and Production Assistance program, part of the American Recovery and Reinvestment Act. (Southeast Farm Press – Dec. 7, 2012)

Feds to probe why alarms failed in W. Va. explosion

Federal investigators are looking into why no alarms sounded as a massive natural gas explosion sent flames as high as hilltops, engulfing homes and a large section of an interstate for more than an hour. Investigators with the National Transportation Safety Board will visit Columbia Gas Transmission's Charleston control room this week to try to learn why the company's alarm system failed, agency spokesman Robert Sumwalt said Wednesday evening. It took Columbia more than an hour - approximately 64 minutes - to manually stop the flow of gas to the pipe about 15 miles away at Sissonville on Tuesday, Sumwalt said. (Kentucky.com - Dec. 12, 2012)

Should US export natural gas? Study for DOE fuels fiery debate.

According to the study, global market conditions are not yet ripe for US natural gas exports, but when they are, the exports would benefit the economy. A key issue is how that benefit is shared. One of the key energy battles of the next decade is emerging now: what to do with the new natural gas geyser now whooshing onto the domestic US energy market. Keep it at home, or export a big part overseas? It's hardly an academic question. Companies are lining up for federal permits to build at least nine liquefied natural gas (LNG) facilities that would allow US energy resource to be shipped overseas. Opposing them are environmentalists, members of Congress, and some industry groups worried it will mean higher energy costs for US consumers and manufacturers and potentially the loss of some jobs. (The Christian Science Monitor – Dec. 6, 2012)

Kentucky Retail Fuel Prices (Dollars per gallon)

Product	12/13/2012	12/6/2012	11/29/2012	11/20/2012	Year Ago
Gasoline (State avg.)	3.244	3.376	3.418	3.299	3.207
Ashland	3.301	3.398	3.468	3.332	3.335
Covington	3.309	3.464	3.538	3.44	3.242
Lexington	3.218	3.405	3.45	3.326	3.216
Louisville	3.285	3.428	3.448	3.167	3.15
Owensboro	3.187	3.253	3.279	3.285	3.195
Diesel (State avg.)	4.056	4.133	4.157	4.02	3.882
Ashland	4.062	4.122	4.139	4.036	3.925
Covington	4.12	4.206	4.211	4.037	3.933
Lexington	4.091	4.181	4.213	4.051	3.862
Louisville	4.023	4.143	4.182	4.011	3.883

Note: The record high average price for gasoline in Kentucky is \$4.089, reported on July 10, 2008.

Source: Gasoline (unleaded regular) & Diesel: National AAA,

Product	12/10/2012	12/3/2012	11/26/2012	11/19/2012	Year Ago
Heating Oil (dollars per gallon)	3.735	3.733	3.851	3.719	3.458
Propane (dollars per gallon)	2.078	2.081	2.073	2.077	2.571

Source: U.S. Energy Information Administration

Wholesale Fuel Prices

Spot Prices	12/12/2012	12/5/2012	11/28/2012	11/19/2012	Year Ago
Crude Oil (Dollars per barrel) <i>West Texas Intermediate, job</i>	86.77	87.88	86.49	89.29	94.95
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	3.331	3.405	3.46	3.605	4.325

Source: the Wall Street Journal

Futures		12-Jan	13-Feb	13-Mar
Crude Oil (Dollars per barrel) <i>Light Sweet Crude Oil</i>	12/12/2012	86.77	87.31	87.89
	12/5/2012	87.88	88.47	
	11/28/2012	86.75	87.31	
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	12/12/2012	3.382	3.412	3.426
	12/5/2012	3.7	3.72	
	11/28/2012	3.879	3.89	
Propane (Dollars per gallon) <i>Mt Belvieu (OPIS)</i>	12/12/2012	0.755	0.76	0.765
	12/5/2012	0.7845	0.789	
	11/28/2012	0.915	0.93	
Coal (Dollars per ton) <i>Central Appalachian</i>	12/12/2012	60.48	61.12	61.5
	12/5/2012	62.03	62.52	
	11/28/2012	63.03	64.16	

Source: CME Group



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