

Kentucky Energy Watch

Department for Energy Development and Independence

A snapshot of state and national energy issues



WVU study finds poverty, mountaintop mines linked

Poverty in Appalachia is concentrated in the communities around mountaintop removal mines, and people living in those areas suffer greater risk of early deaths, according to a West Virginia University study. The study by Michael Hendryx, an associate professor in the WVU Department of Community Medicine, found that mountaintop mining areas in West Virginia, Kentucky, Tennessee and Virginia had significantly higher annual death rates, higher total poverty rates and child poverty rates compared to other counties in 2000-07. (The Associated Press, July 24, 2011)

Carbon scrubbing condensers made on the cheap

Chemists have cooked up some cheap carbon dioxide-capturing compounds, reports a study, a potential boon for lowering greenhouse gas emissions. Added to smokestack scrubbers, such porous materials might limit emissions of carbon dioxide and methane, linked to global warming. Soaking the carbon out of smokestacks before it reaches the atmosphere and stuffing it underground, "carbon sequestration," is seen by many as an option for addressing climate change, if it can be done cheaply enough to be cost-effective. Carbon scrubbers have been demonstrated before, but the "inexpensive, commercially available," ingredients reported in the journal, *Nature Communications*, by a team led by Paritosh Mohanty of Lehigh University in Bethlehem, Pa., may represent a step toward improved smokestack screens for carbon, where about 15 percent of the exhaust from a coal-fired power plant is carbon dioxide. (USA Today, July 28, 2011)

Coal ash: the health threat

You can't see the smokestacks of the Cane Run Power Station from Stephanie Hogan's home, even though she lives a block away. And while the power plant isn't visible, it's still a looming presence in Hogan's life. "Oh, he breathes so bad, he sounds like Darth Vader," Hogan shakes her head, and Cody wheezes. "You ain't even been running." The family bought their trailer near the Louisville Gas and Electric-operated power plant about 15 months ago, and since then, Cody has developed serious respiratory problems. Eventually, his mom took him to a specialist, who pinpointed the potential cause of Cody's sickness. "I think it was the second visit, she asked where we lived," Hogan said. "And I told her, and she said 'Oh, you live next to that power plant. You need to move.'" (Kentucky Public Radio, July 25, 2011)

Gov. Beshear announces final on-farm energy awards totaling \$773,000

Governor Steve Beshear today announced the awarding of \$773,447 in On-Farm Energy Efficiency & Production Incentives grants. This program is the result of the partnership between the Governor's Office of Agricultural Policy and Kentucky's Department for Energy Development & Independence with funding from the American Recovery & Reinvestment Act through the U.S. Department of Energy. "In October 2009, I announced the availability of stimulus funds for on-farm energy efficiency improvements in Kentucky," Gov. Beshear said. "I am pleased to announce that 100 farm families were able to take advantage of this opportunity in 2011 to improve farm energy efficiency or biomass production, bringing the total number of farms assisted through this program to 192." (Governor's Office Press Release, July 27, 2011)

Is shale gas a pipedream?

Don't get starry-eyed over all that projected shale-gas. It's one thing to dig it out. It's another to transport it. And at least one trade group says that massive amounts of investment must now go into creating the pipelines that would carry that fuel. That's a huge task. But add in the concerns of community organizations that fear such development would not just disrupt their local ecologies but also increase the dangers from pipeline accidents. While that angst is legitimate and must be addressed by pipeline companies, shale-gas has the potential to supply energy here for the next century. "The good news is that the natural gas industry has a proven track record of constructing and financing this level of infrastructure," says Don Santa, chief executive of the Interstate Natural Gas Association of America. (Energy Biz, July 21, 2011)

The gold standard for energy systems

Fort Knox energy management has undergone a remarkable makeover from a snafu of inefficient buildings served by antiquated systems several years ago to the new gold standard of the Army today. Commanders, administrators and energy managers at the 93-year-old garrison have slashed energy use 41 percent in the past 20 years. Energy efficiency measures will save \$10 million this year and more next year, they estimate. Fort Knox has changed its culture, akin to the transformation untold thousands of raw Army recruits have undergone in boot camp there over the years. "Our commander (Col. Eric Schwartz) is very interested in energy conservation," said Patrick Walsh, director of public works at Fort Knox. (The Lane Report, July 21, 2011)

University of Kentucky-led research could be path to new energy sources

A team of researchers led by University of Kentucky College of Agriculture Professor Joe Chappell is making a connection from prehistoric times to the present that could result in being able to genetically create a replacement for oil and coal shale deposits. This could have fundamental implications for the future of the earth's energy supply... This team of investigators isolated the necessary genes, characterized the biochemical traits encoded by these genes, and then genetically engineered yeast to produce this very high-value oil. This work has provided the first example of recreating a true direct replacement for oil and coal shale deposits. (The Lane Report, July 21, 2011)

Kentucky Retail Fuel Prices (Dollars per gallon)

Product	7/28/2011	7/22/2011	7/15/2011	7/8/2011	Year Ago
Gasoline (State avg.)	3.689	3.67	3.643	3.619	2.714
Ashland	3.714	3.706	3.681	3.71	2.757
Covington	3.773	3.721	3.707	3.788	2.772
Lexington	3.679	3.666	3.633	3.649	2.737
Louisville	3.745	3.752	3.718	3.755	2.77
Owensboro	3.608	3.611	3.609	3.477	2.632
Diesel (State avg.)	3.899	3.887	3.869	3.824	2.899
Ashland	3.907	3.865	3.845	3.733	2.933
Covington	3.805	3.8	3.8	3.797	2.915
Lexington	3.872	3.867	3.854	3.787	2.987
Louisville	3.839	3.825	3.824	3.811	2.871
Owensboro	3.929	3.917	3.918	3.874	2.868

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,

Wholesale Fuel Prices

Spot Prices	7/27/2011	7/22/2011	7/15/2011	7/7/2011	Year Ago
Crude Oil (Dollars per barrel) <i>West Texas Intermediate, job</i>	97.4	98.93	95.69	98.67	76.99
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	4.445	4.563	4.39	4.19	4.795

Source: The Wall Street Journal

Futures		11-Sep	11-Oct	11-Nov
Crude Oil (Dollars per barrel) <i>Light Sweet Crude Oil</i>	7/27/2011	97.40	97.84	98.33
	7/22/2011	98.40	98.78	*
	7/15/2011	96.11	96.55	*
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	7/27/2011	4.318	4.333	4.446
	7/22/2011	4.469	4.483	*
	7/15/2011	4.358	4.378	*
Propane (Dollars per gallon) <i>Mt Belvieu (OPIS)</i>	7/27/2011	1.552	1.56	1.567
	7/22/2011	1.537	1.545	*
	7/15/2011	1.532	1.54	*
Coal (Dollars per ton) <i>Central Appalachian</i>	7/27/2011	77.12	77.48	77.48
	7/22/2011	77.5	77.45	*
	7/15/2011	76.63	46.8	*

Source: CME Group



The Department for Energy Development and Independence does not discriminate on the basis of race, color, national origin, sex, age, religion or disability and provides, on request, reasonable accommodations including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs and activities. To request materials in an alternative format, call the Department for Energy Development and Independence at (800) 282-0868. Persons with hearing and speech impairments can contact the agency by using the Kentucky Relay Service, a toll-free telecommunication device for the deaf (TDD). For voice to TDD, call (800) 648-6057. For TDD to voice, call (800) 648-6056.

