

# Kentucky *Department for Energy Development and Independence* Energy Watch

*A snapshot of state and national energy issues*

## ***Seeking Cures in Kentucky Coal Mines***

The Matrix Energy Mine No. 1 in eastern Kentucky stretches 7 miles to its deepest point. Tiny cars creak along tracks laid on the ground in the bowels of the operation, opened in 2004, and miners here collect 4,500 tons of coal each day. But Jon Thorson, a professor of pharmaceutical sciences at the University of Kentucky and director at the Center for Pharmaceutical Research and Innovation, isn't all that interested in fossilized carbon. (Newsweek January 20, 2016)

## ***Central Kentucky County to Consider Changes for Liquids Pipelines***

A county in central Kentucky is poised to consider a zoning change that could affect a massive multi-state pipeline project. Boyle County government will consider whether to require all hazardous liquids pipelines to receive permits from the county's zoning board. That would create a hurdle if energy company Kinder Morgan's conversion of the massive Tennessee Gas Pipeline moves forward. (WFPL January 18, 2016)

## ***Oil stabilizes near 2003 lows ahead of EIA data***

Oil firmed on Thursday, rising along with equities following hints of monetary stimulus in Europe, but crude prices remained near 12-year lows on persistent concerns about a supply overhang and the outlook for demand. Oil futures dropped to their lowest levels since 2003 this week as investors worry that a glut of crude is combining with slowing demand due to economic weakness, especially in China. (CNBC January 20, 2016)

## ***Iran's petroleum production expected to increase as sanctions are lifted***

Implementation day for the Joint Comprehensive Plan of Action (JCPOA), an agreement among Iran, the P5+1 (the five permanent members of the United Nations Security Council and Germany), and the European Union (EU), occurred on January 16 when the International Atomic Energy Agency verified that Iran had completed the key physical steps required to trigger sanctions relief. (Today in Energy January 19, 2016)

## ***Energy Department Announces \$220 Million in Grid Modernization Funding***

Energy Department on January 14 announced the award of up to \$220 million over three years, subject to congressional appropriations, to its national laboratories and partners to support critical research and development in advanced storage systems, clean energy integration, standards and test procedures, and a number of other key grid modernization areas. The Energy Department also announced its Grid Modernization Multi-Year Program Plan, which lays out a blueprint for the Energy Department's research, development, and demonstration agenda to enable a modernized grid. (EERE Network News January 20, 2016)

## ***We aren't talking enough about cybersecurity***

We all know the publicized issues facing the American voters in the upcoming presidential election. And we have heard each candidate proclaim and re-proclaim, and sometimes change their proclamations on each issue. So forgive me if I insist on listing them here. I obtained the list, by the way, from the [whitehouse.gov](http://whitehouse.gov) website. The top five issues are: the economy, education, energy and environment, immigration and health care. (Business Insider January 17, 2016)

## ***Energy Department Announces \$18 Million to Develop Solar Energy Storage Solutions***

The Energy Department on January 19 announced \$18 million in funding for six new projects that will enable the development and demonstration of integrated, scalable, and cost-effective solar technologies that incorporate energy storage. Solutions for modernizing the grid and enhancing storage will be developed as part of the Energy Department's Grid Modernization Initiative under the SunShot Initiative. (EERE Network News January 20, 2016)

## ***What is the role of coal in the United States?***

The United States has the world's largest estimated recoverable reserves of coal, and it is a net exporter of coal. In 2014, U.S. coal mines produced about 1 billion short tons of coal, the first increase in annual coal output in three years. More than 90% of the coal produced in the United States was used by U.S. power plants to generate electricity. Although coal has been the largest source of electricity generation in the United States for more than 60 years, its annual share of total net generation declined from nearly 50% in 2007 to 39% in 2014. (Energy in Brief January 19, 2016)



Kentucky Retail Fuel Prices (Dollars per gallon)

Product	1/21/2016	1/14/2016	1/7/2016	12/17/2015	Year Ago
<b>Gasoline (State avg.)</b>	\$ 1.70	\$ 1.81	\$ 2.00	\$ 2.01	\$ 2.04
Ashland	\$ 1.77	\$ 1.83	\$ 1.93	\$ 1.95	\$ 2.00
Covington	\$ 1.80	\$ 1.91	\$ 1.97	\$ 1.96	\$ 2.17
Lexington	\$ 1.64	\$ 1.79	\$ 1.96	\$ 1.91	\$ 2.07
Louisville	\$ 1.69	\$ 1.86	\$ 2.02	\$ 1.88	\$ 2.15
Owensboro	\$ 1.63	\$ 1.69	\$ 1.78	\$ 1.87	\$ 1.85
<b>Diesel (State avg.)</b>	\$ 2.08	\$ 2.17	\$ 2.23	\$ 2.33	\$ 2.97
Ashland	\$ 2.08	\$ 2.16	\$ 2.23	\$ 2.33	\$ 3.10
Covington	\$ 2.10	\$ 2.26	\$ 2.31	\$ 2.38	\$ 3.02
Lexington	\$ 2.12	\$ 2.25	\$ 2.31	\$ 2.39	\$ 3.10
Louisville	\$ 2.07	\$ 2.25	\$ 2.31	\$ 2.39	\$ 3.02
Owensboro	\$ 2.08	\$ 2.14	\$ 2.20	\$ 2.28	\$ 2.64

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	1/18/2016	1/11/2016	1/4/2016	12/14/2015	Year Ago
Heating Oil (dollars per gallon)	\$ 1.72	\$ 1.76	\$ 1.78	\$ 1.81	\$ 2.43
Propane (dollars per gallon)	\$ 1.82	\$ 1.83	\$ 1.79	\$ 1.74	\$ 2.16

[http://www.eia.gov/dnav/pet/pet\\_pri\\_wfr\\_dcus\\_SKY\\_w.htm](http://www.eia.gov/dnav/pet/pet_pri_wfr_dcus_SKY_w.htm)

Spot Prices	1/19/2016	1/11/2016	1/4/2016	12/14/2015	Year Ago
Crude Oil (Dollars per barrel) <i>West Texas Intermediate, fob</i>	\$ 28.47	\$ 31.42	\$ 36.81	\$ 36.31	\$ 45.93
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	\$ 2.23	\$ 2.47	\$ 2.39	\$ 1.70	\$ 3.11
Coal Price (dollars per short ton) <i>Central Appalachia</i>	\$ 43.50	\$ 43.50	\$ 43.50	\$ 43.50	\$ 53.06
Coal Price (dollars per short ton) <i>Illinois Basin</i>	\$ 32.60	\$ 32.60	\$ 32.60	\$ 32.60	\$ 45.32

Sources: <http://www.infomine.com/investment/metal-prices/coal/1-year> [http://ycharts.com/indicators/natural\\_gas\\_spot\\_price](http://ycharts.com/indicators/natural_gas_spot_price)  
<https://www.quandl.com/data/DOE/COAL-US-Coal-Prices-by-Region> <http://markets.ft.com/research/Markets/Tearsheets/Summary?s=1069936>

Futures		February 2016	March 2016	April 2016
Crude Oil (Dollars per barrel) <i>Light Sweet Crude Oil</i>	1/13/2016	\$ 30.48	\$ 31.39	\$ 32.35
	1/20/2016	\$ 26.55	\$ 28.35	\$ 29.69
Natural Gas (Dollars per MMBtu) <i>Henry-Hub</i>	1/13/2016	\$ 2.27	\$ 2.29	\$ 2.34
	1/20/2016	\$ 2.12	\$ 2.12	\$ 2.20
Propane (Dollars per gallon) <i>Mt Belvieu (OPIS)</i>	1/13/2016	\$ 0.34	\$ 0.33	\$ 0.33
	1/20/2016	\$ 0.30	\$ 0.30	\$ 0.30

Source: [http://www.cmegroup.com/daily\\_bulletin/current/Section61\\_Energy\\_Futures\\_Products.pdf](http://www.cmegroup.com/daily_bulletin/current/Section61_Energy_Futures_Products.pdf)

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