

EIA-Short-Term Energy Outlook – Highlights

EIA estimates that the amount of electricity generated using natural gas reached a record high during July, surpassing the previous record set in July 2015. The record natural gas-fired generation was driven by competitive economics compared with coal (despite recent natural gas price increases) and by warmer-than-normal temperatures that boosted overall electricity generation. For 2016, EIA expects natural gas to fuel 34% of electricity generation compared with 30% for coal. In 2015, natural gas was used to generate slightly less than 33% of electricity, and coal was used to generate slightly more than 33% of electricity.

Benchmark North Sea Brent crude oil spot prices averaged \$45/barrel (b) in July, a \$3/b decrease from June. This was the first monthly decrease since the Brent price fell to a 12-year low of \$31/b in January 2016.

Brent crude oil prices are forecast to average \$42/b in 2016 and \$52/b in 2017. West Texas Intermediate (WTI) crude oil prices are forecast to be slightly less than Brent in 2016 and the same as Brent in 2017. The current values of futures and options contracts suggest high uncertainty in the price outlook. For example, EIA's forecast for the average WTI price in November 2016 of \$44/b should be considered in the context of Nymex contract values for November 2016 delivery. Contracts traded during the five-day period ending August 4 (Market Prices and Uncertainty Report) suggest the market expects WTI prices could range from \$29/b to \$61/b (at the 95% confidence interval) in November 2016.

U.S. regular gasoline retail prices this summer (April through September) are forecast to average \$2.19/gallon (gal), 6 cents/gal lower than forecast in last month's STEO and 44 cents/gal lower than last summer. U.S. regular gasoline retail prices are forecast to average \$2.06/gal in 2016 and \$2.26/gal in 2017.

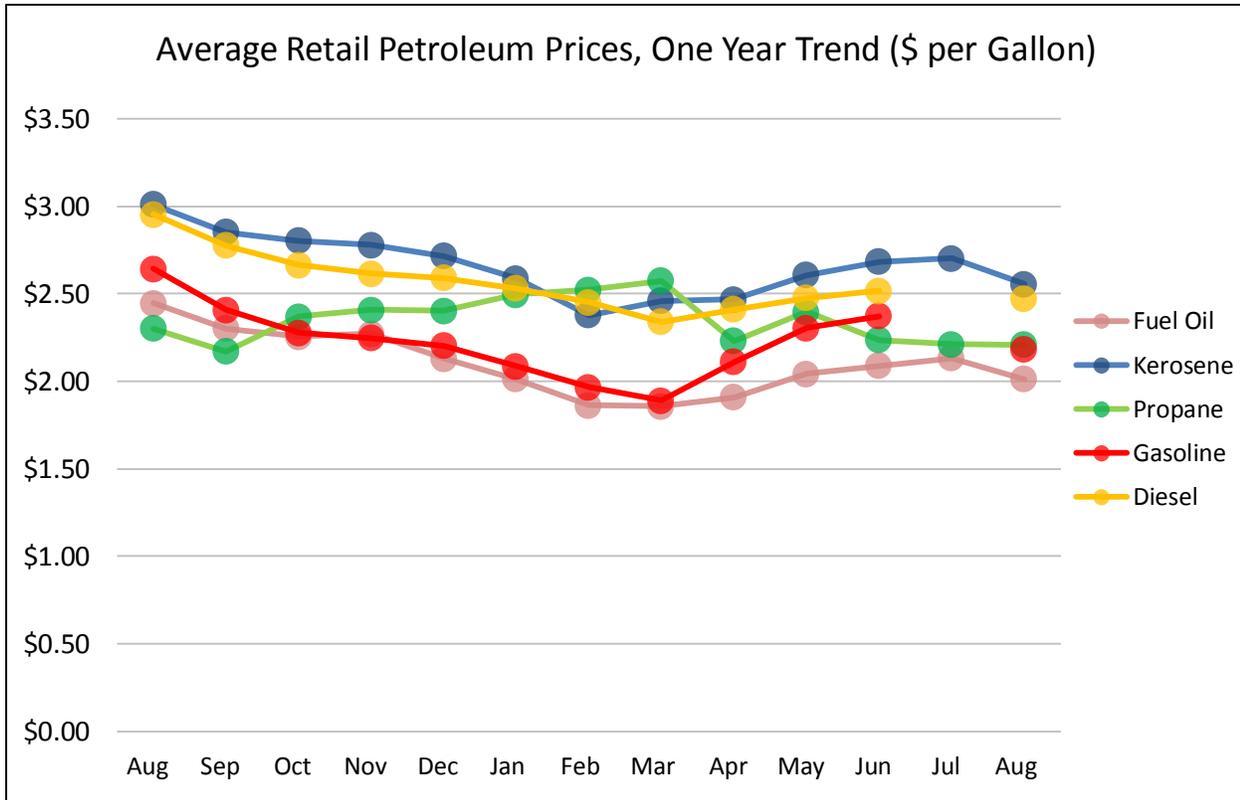
U.S. crude oil production averaged 9.4 million barrels per day (b/d) in 2015. Production is forecast to average 8.7 million b/d in 2016 and 8.3 million b/d in 2017. EIA estimates that crude oil production for July 2016 averaged 8.6 million b/d, almost 0.2 million b/d below the June 2016 level, and 1.1 million b/d below the 9.7 million b/d reached in April 2015.

Natural gas working inventories were 3,288 billion cubic feet (Bcf) on July 29. This level is 13% higher than last year during the same week, and 16% higher than the previous five-year (2011-15) average for that week. EIA projects that natural gas inventories will be 4,042 Bcf at the end of October 2016, which would be the highest end-of-October level on record.

Editor's Note: Data presented in the Vermont Fuel Price Report, as in the past, is collected on the first Monday of the month.

Vermont Fuel Price Report

August
2016



| Percentage Change in Average Retail Petroleum Prices, Month over Month & Year To Date | | | | | |
|---|----------------|----------------|-----------------|----------------|-----------------|
| | <u>Aug '16</u> | <u>Jul '16</u> | <u>% Change</u> | <u>Aug '15</u> | <u>% Change</u> |
| No. 2 Fuel Oil | \$2.01 | \$2.13 | -5.6% | \$2.45 | -17.7% |
| Kerosene | \$2.55 | \$2.70 | -5.5% | \$3.01 | -15.1% |
| Propane | \$2.21 | \$2.21 | 0.0% | \$2.30 | -4.0% |
| Reg. Unleaded Gasoline | \$2.18 | No Data | N/A | \$2.64 | -17.4% |
| Diesel | \$2.47 | No Data | N/A | \$2.96 | -16.4% |

Vermont Fuel Price Report

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| Comparing the Cost of Heating Fuels | | | | | | | |
|---|------------|--------------------|---------|----------|---|-----------------|----------|
| Type of Energy | BTU/unit | Typical Efficiency | \$/unit | \$/MMBtu | | High Efficiency | \$/MMBtu |
| Fuel Oil, gallon | 138,200 | 80% | \$2.01 | \$18.21 | | 95% | \$15.33 |
| Kerosene, gallon | 136,600 | 80% | \$2.55 | \$23.38 | | | |
| Propane, gallon | 91,600 | 80% | \$2.21 | \$30.16 | | 95% | \$25.40 |
| Natural Gas, Ccf | 100,000 | 80% | \$1.41 | \$17.67 | * | 95% | \$14.88 |
| Electricity, kWh (resistive heat) | 3,412 | 100% | \$0.15 | \$43.46 | | | |
| Electricity, kWh (cold climate heat pump) | 3,412 | | \$0.15 | | # | 240% | \$18.32 |
| Wood, cord (green) | 22,000,000 | 60% | \$227 | \$17.21 | ^ | | |
| Pellets, ton | 16,400,000 | 80% | \$275 | \$20.96 | ^ | | |

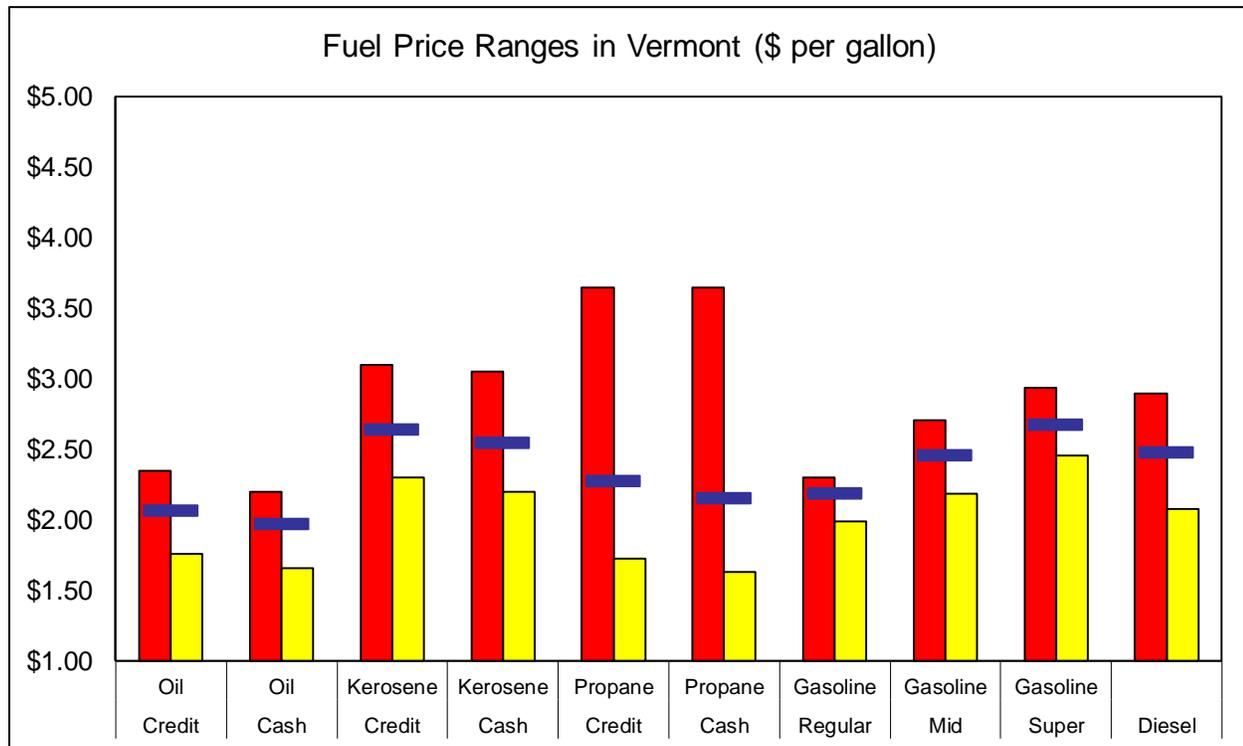
* Natural Gas price is based on VGS residential rate effective Aug 5th, 2016.

see October 2015 Fuel Price Report for discussion of heat pump coefficient of performance

^ Cord Wood price updated 8/2015 from small survey sample. Pellet price updated 5/2016 from small survey sample

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NOTE: The Vermont Fuel Price Report is published monthly by the Vermont Department of Public Service. Prices are collected on or about the first Monday of each month and reflect dealer discounts for cash or self-service, except propane prices, which are an average of the credit and discount price. Propane prices are based on 1,000 + gallons. For more information please contact John Woodward at (802) 828-3061 or by email at john.woodward@vermont.gov.