

## EIA-Short-Term Energy Outlook – Highlights

Benchmark North Sea Brent crude oil spot prices averaged \$47/barrel (b) in May, a \$5/b increase from April and the fourth consecutive monthly increase since reaching a 12-year low of \$31/b in January. Growing global oil supply disruptions, rising oil demand, and falling U.S. crude oil production contributed to the price increase.

Brent crude oil prices are forecast to average \$43/b in 2016 and \$52/b in 2017, \$3/b and \$1/b higher than forecast in last month's STEO, respectively. West Texas Intermediate (WTI) crude oil prices are forecast to be slightly lower than Brent in 2016 and to be the same as Brent in 2017. However, 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 September 2016 of \$46/b should be considered in the context of Nymex contract values for September 2016 delivery. These contracts traded during the five-day period ending June 2 (Market Prices and Uncertainty Report) suggest the market expects WTI prices could range from \$36/b to \$69/b (at the 95% confidence interval) in September 2016.

During the April-through-September summer driving season of 2016, U.S. regular gasoline retail prices are forecast to average \$2.27/gallon (gal), 6 cents/gal higher than forecast in last month's STEO but 36 cents/gal lower than last summer. U.S. regular gasoline retail prices are forecast to average \$2.13/gal in 2016 and \$2.27/gal in 2017, which are 5 cents/gal higher and 3 cents/gal higher than forecast in last month's STEO, respectively.

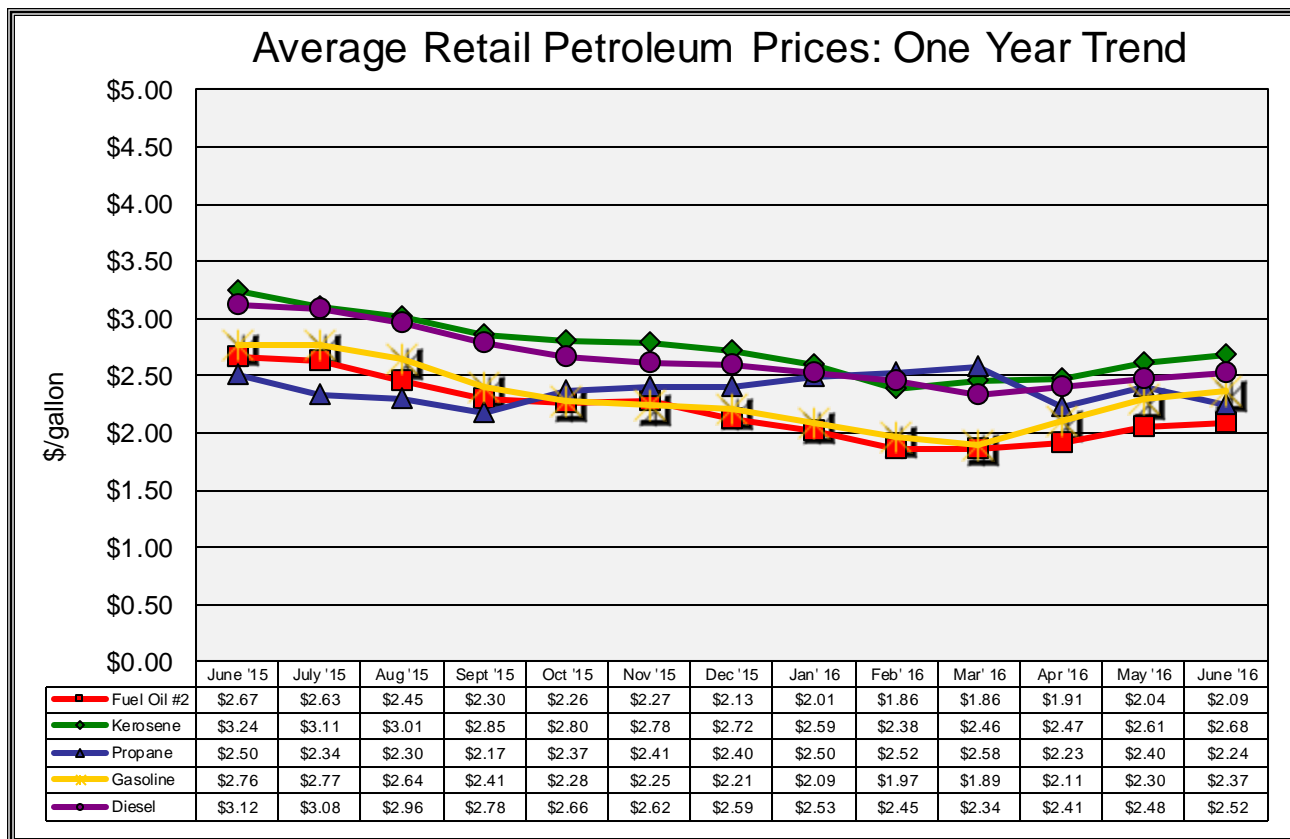
U.S. crude oil production averaged 9.4 million barrels per day (b/d) in 2015. Production is forecast to average 8.6 million b/d in 2016 and 8.2 million b/d in 2017, both unchanged from last month's STEO. EIA estimates that crude oil production for May 2016 averaged 8.7 million b/d, which is more than 0.2 million b/d below the April 2016 level, and approximately 1 million b/d below the 9.7 million b/d level reached in April 2015.

Natural gas working inventories were 2,907 billion cubic feet (Bcf) on May 27. This level is 32% higher than a year earlier, and 35% higher than the previous five-year (2011-15) average for that week. The natural gas storage injection season typically runs from April through October. EIA projects that natural gas inventories will be 4,161 Bcf at the end of October 2016, which would be the highest end-of-October level on record. Henry Hub spot prices are forecast to average \$2.22/million British thermal units (MMBtu) in 2016 and \$2.96/MMBtu in 2017, compared with an average of \$2.63/MMBtu in 2015.

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

June  
2016



Vermont Average Retail Petroleum Prices (\$ per gallon)					
	June '16	May '16	% Change	June '15	% Change
No. 2 Fuel Oil	\$2.09	\$2.04	2.2%	\$2.67	-21.8%
Kerosene	\$2.68	\$2.61	2.9%	\$3.24	-17.1%
Propane	\$2.24	\$2.40	-6.7%	\$2.50	-10.6%
Reg. Unleaded Gasoline	\$2.37	\$2.30	2.9%	\$2.76	-14.1%
Diesel	\$2.52	\$2.48	1.6%	\$3.12	-19.3%

# Vermont Fuel Price Report

June  
2016

## Comparing the Cost of Heating Fuels

Type of Energy	BTU/unit	Typical Efficiency	\$/unit	\$/MMBtu		High Efficiency	\$/MMBtu
Fuel Oil, gallon	138,200	80%	\$2.09	\$18.88		95%	\$15.90
Kerosene, gallon	136,600	80%	\$2.68	\$24.56			
Propane, gallon	91,600	80%	\$2.24	\$30.51		95%	\$25.69
Natural Gas, Ccf	100,000	80%	\$1.38	\$17.23	*	95%	\$14.51
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	^		

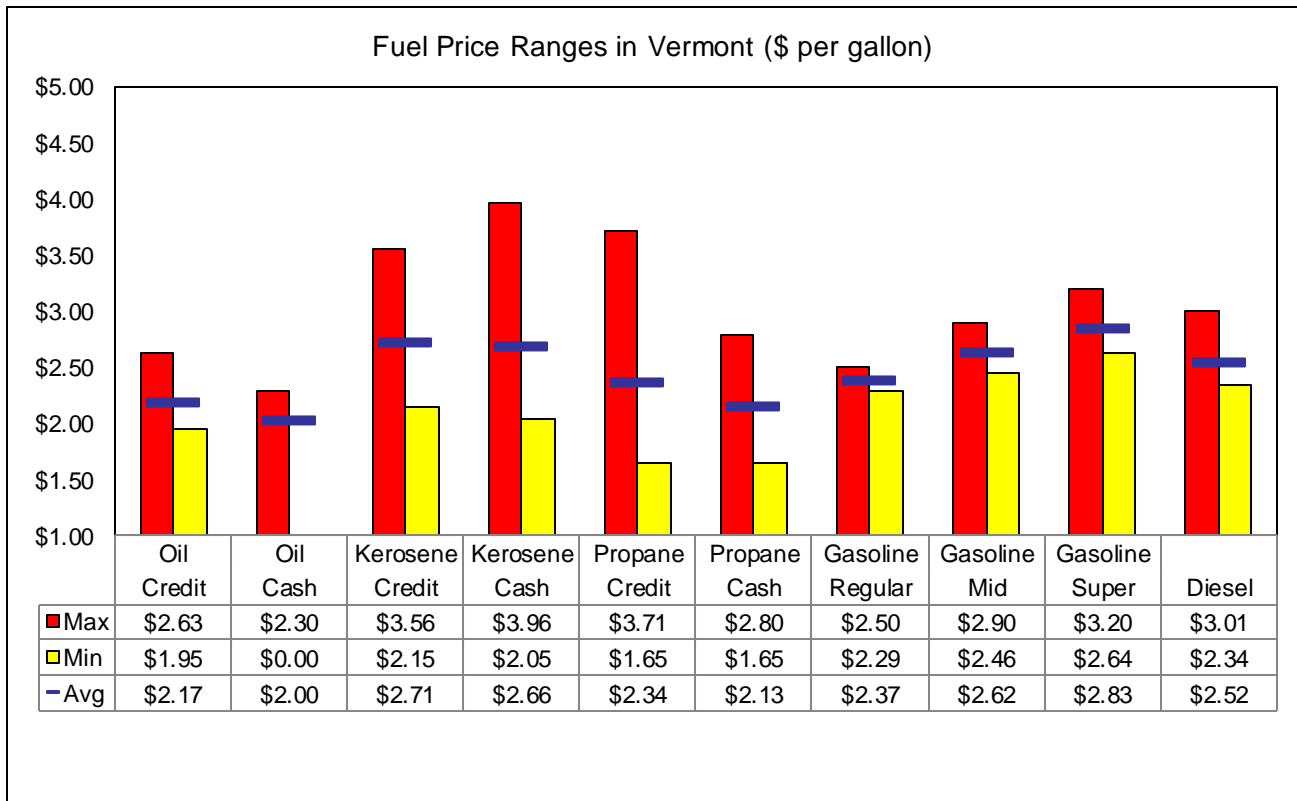
\* Natural Gas price is based on VGS residential rate effective May 1st, 2016.

# 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

# Vermont Fuel Price Report

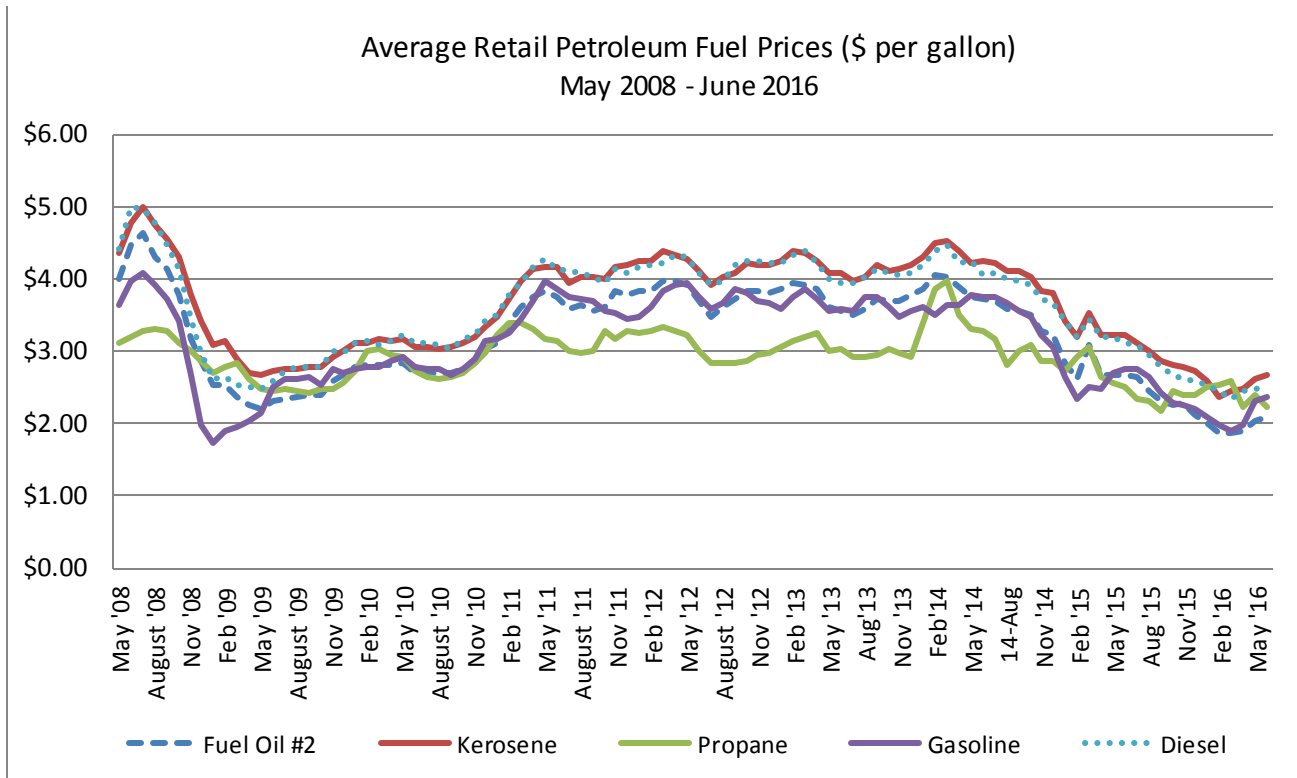
June  
2016



	Oil-Credit	Oil-Cash	Kero-Credit	Kero-Cash	Pro-Credit	Pro-Cash	Regular Gasoline	Mid Grade Gasoline	Super Gasoline	Diesel
Stan.Dev \$	\$0.16	\$0.34	\$0.30	\$0.39	\$0.52	\$0.30	\$0.26	\$0.94	\$0.24	\$0.42
Stan.Dev %	7.18%	16.73%	11.06%	14.52%	22.39%	13.97%	2.05%	5.88%	1.93%	2.22%

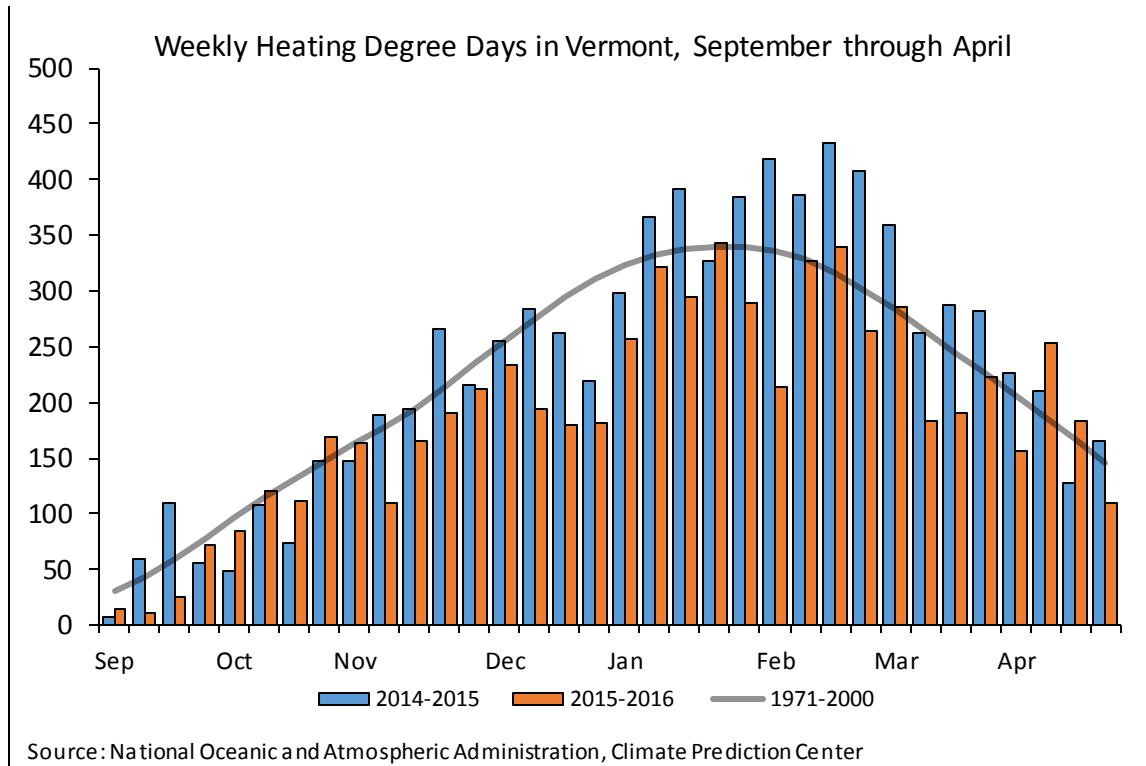
# Vermont Fuel Price Report

June  
2016



# Vermont Fuel Price Report

June  
2016



Heating Degree Days in Vermont per Month

	Current Season 2015-2016	Last Season 2014-2015	"Normal" Season 1971-2000
Sep	121	234	211
Oct	485	376	491
Nov	840	1,013	984
Dec	790	1,020	1,137
Jan	1,504	1,768	1,670
Feb	1,145	1,647	1,281
Mar	881	1,191	1,019
Apr	702	730	693
Cumulative	6,468	7,979	7,496

# Vermont Fuel Price Report

June  
2016

*Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."*

*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](mailto:john.woodward@vermont.gov).*