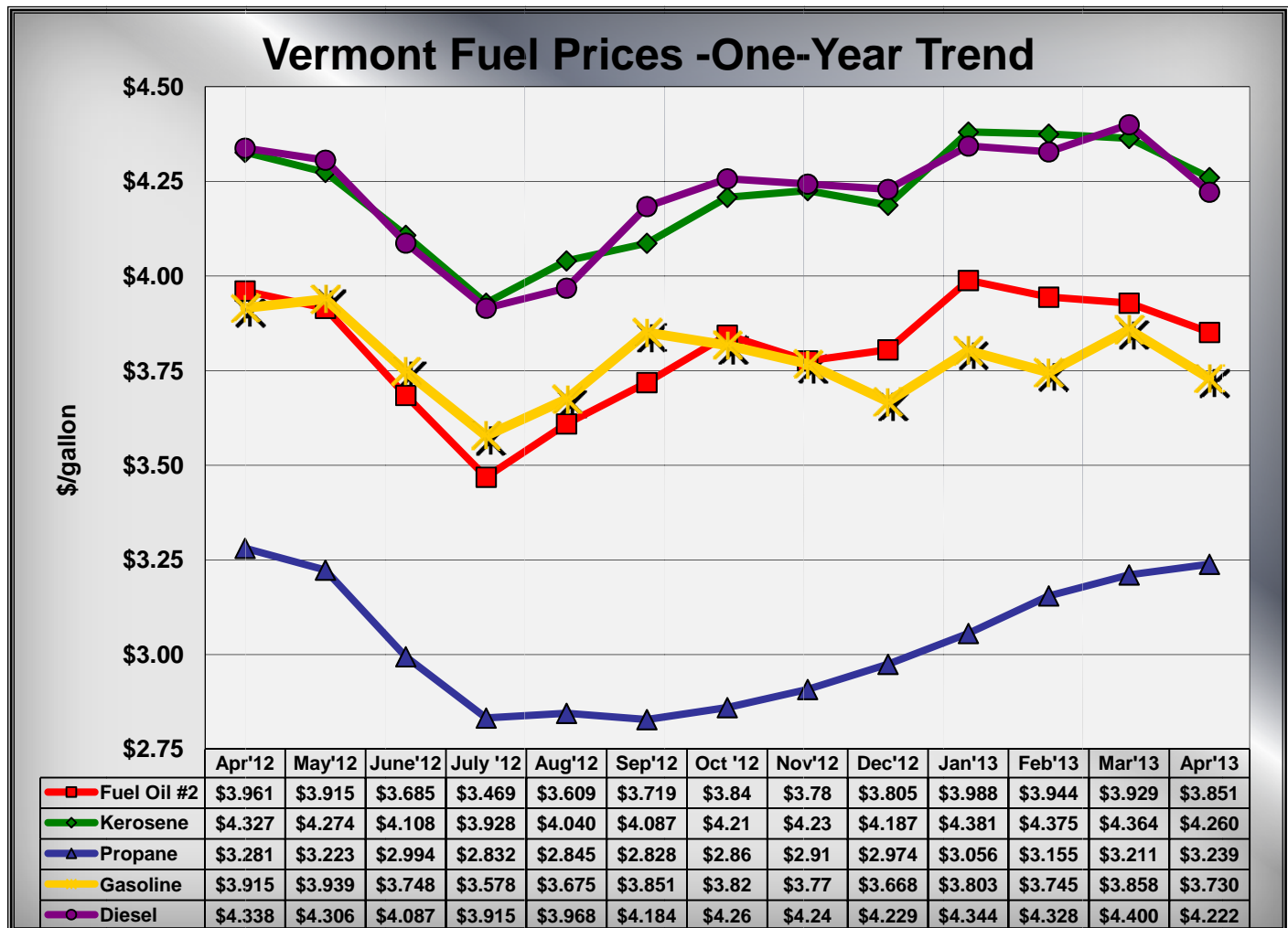


## EIA-Short-Term Energy Outlook – Highlights

- During the April-through-September summer driving season this year, regular gasoline retail prices are forecast to average \$3.63 per gallon. The projected monthly average regular retail gasoline price falls from \$3.69 per gallon in May to \$3.57 per gallon in September. EIA expects regular gasoline retail prices to average \$3.56 per gallon in 2013 and \$3.39 per gallon in 2014, compared with \$3.63 per gallon in 2012. The July 2013 New York harbor reformulated blendstock for oxygenate blending (RBOB) futures contract averaged \$2.97 per gallon for the five trading days ending April 4, 2013. Based on the market value of futures and options contracts, there is a 12 percent probability that its price at expiration will exceed \$3.35 per gallon, consistent with a monthly average regular-grade gasoline retail price exceeding \$4.00 per gallon in July 2013. (see EIA [Summer Fuels Outlook slideshow](#))
- EIA expects that the Brent crude oil spot price, which averaged \$112 per barrel in 2012 and rose to \$119 per barrel in early February 2013, will average \$108 per barrel in 2013 and \$101 per barrel in 2014. The projected discount of West Texas Intermediate (WTI) crude oil to Brent, which increased to a monthly average of more than \$20 per barrel in February 2013, is forecast to average \$14 per barrel in 2013 and \$9 per barrel in 2014, as planned new pipeline capacity lowers the cost of moving mid-continent crude oil to the Gulf Coast refining centers.
- Natural gas working inventories ended March 2013 at an estimated 1.69 trillion cubic feet (Tcf), about 0.79 Tcf below the level at the same time a year ago and 0.41 Tcf below the five-year average (2008-12). EIA expects the Henry Hub natural gas spot price, which averaged \$2.75 per million British thermal units (MMBtu) in 2012, will average \$3.52 per MMBtu in 2013 and \$3.60 per MMBtu in 2014.
- With actual and forecast natural gas prices in the first 9 months of 2013 well above those during the comparable 2012 period, electricity generators using natural gas are expected to lose some of the market share gained from coal generation in 2012.

<http://www.eia.gov/forecasts/steo/>

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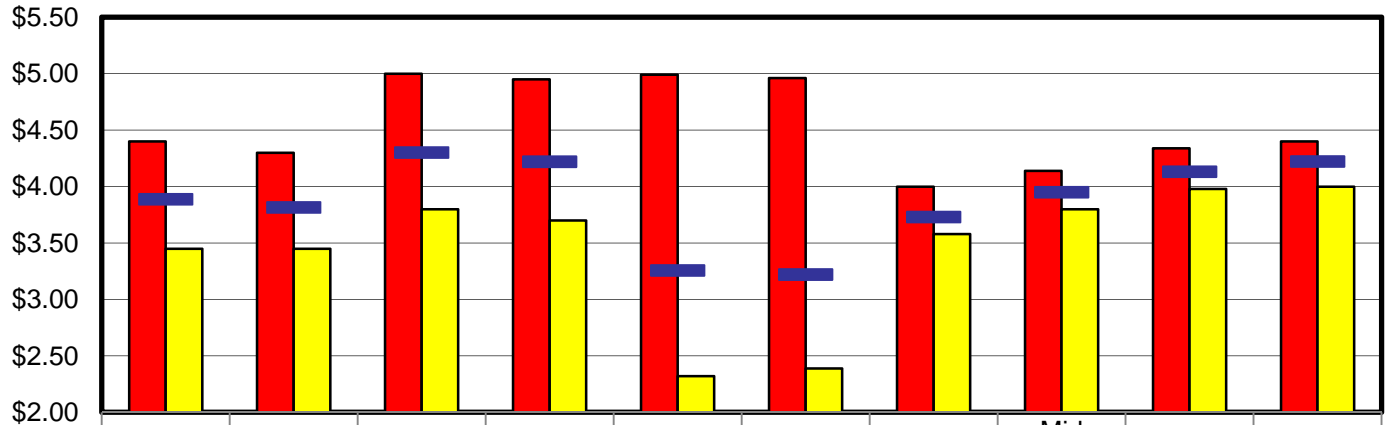
Vermont Average Retail Petroleum Prices (per gallon)					
	Apr'13	Mar'13	%change	Apr'12	%change
No. 2 Fuel Oil	\$3.851	\$3.929	-1.97%	\$3.961	-2.77%
Kerosene	\$4.260	\$4.364	-2.37%	\$4.327	-1.54%
Propane	\$3.239	\$3.211	0.87%	\$3.281	-1.29%
Reg. Unleaded Gasoline	\$3.730	\$3.858	-3.33%	\$3.915	-4.74%
Diesel	\$4.222	\$4.400	-4.05%	\$4.338	-2.68%

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# Vermont Fuel Price Report

April, 2013

### Fuel Price Ranges in Vermont



	Oil-Credit	Oil-Cash	Kero-Credit	Kero-Cash	Pro-Credit	Pro-Cash	Regular Gasoline	Mid Grade Gasoline	Super Gasoline	Diesel
■ Maximum	\$4.40	\$4.30	\$5.00	\$4.95	\$4.99	\$4.96	\$4.00	\$4.14	\$4.34	\$4.40
■ Minimum	\$3.45	\$3.45	\$3.80	\$3.70	\$2.32	\$2.39	\$3.58	\$3.80	\$3.98	\$4.00
— Average	\$3.89	\$3.81	\$4.30	\$4.22	\$3.26	\$3.22	\$3.73	\$3.95	\$4.13	\$4.22

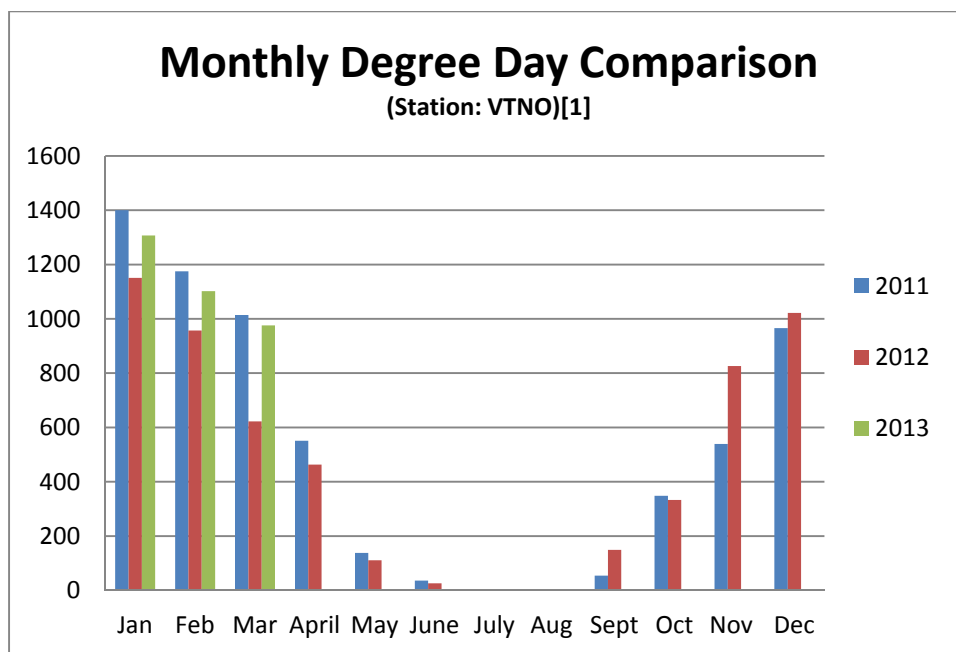
	<u>Oil-Credit</u>	<u>Oil-Cash</u>	<u>Kero-Credit</u>	<u>Kero-Cash</u>	<u>Pro-Credit</u>	<u>Pro-Cash</u>	<u>Regular Gasoline</u>	<u>Mid Grade Gasoline</u>	<u>Super Gasoline</u>	<u>Diesel</u>
<u>Stan.Dev</u> \$	0.212	0.215	0.241	0.244	0.584	0.561	0.260	0.940	0.240	0.420
<u>Stan.Dev</u> %	5.46%	5.63%	5.61%	5.78%	17.93%	17.42%	2.05%	5.88%	1.93%	2.22%

Comparing the Cost of Heating Fuels				
Type of Energy	BTU/unit	Adj Effic	\$/unit	\$/MMBtu
Fuel Oil, gallon	138,200	80%	\$3.85	\$34.83
Kerosene, gallon	136,600	80%	\$4.26	\$38.99
Propane, gallon	91,600	80%	\$3.24	\$44.20
Natural Gas, therm	100,000	80%	\$1.59	\$19.93
Electricity, kwh	3,412	100%	\$0.15	\$43.46
Wood, cord (green)	22,000,000	60%	\$190.00	\$14.39
Pellets, ton	16,400,000	80%	\$247.00	\$18.83

\* The natural gas price is based on the rate effective 2/6/13. \*Wood green updated 11/16/11.

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## Vermont Historical Weather and Degree Day Data



CDD's are used during summer months to compare the current day's average temperature against the 65°F standard to determine the energy demands of cooling your home through air conditioning or fans. For example, if the current day's high is 85°F and the low is 65°F, the day's average temperature will be 75°F. Since 75°F-65°F is 10°F, this day would have 10 cooling degree days. Adding the degree days together for the whole month provides a way to compare previous months or years.

•HDD's are used the same way during winter months to determine the energy demands of heating your home. The 65°F standard still is used, however, the day's average temperature is subtracted instead of added to the standard. For example, if the current day's high is 30°F and the low is 10°F, the day's average temperature will be 20°F. Since 65°F-20°F is 45°F, this day would have 45 heating degree days. Just like cooling degree days, heating degree days may be added together for the entire month to compare to previous months or years.<sup>1</sup>

The primary online source for historical weather and degree day data is the available from the NOAA - National Climatic Data Center (NCDC) web site at: <http://www7.ncdc.noaa.gov/CDO/CDODivisionalSelect.jsp#>

NCDC maintains the world's largest climate data archive and provides climatological services. Records in the archive range from paleoclimatic data to centuries-old journals to data less than an hour old.

<sup>1</sup> <http://www.consumersenergy.com/content.aspx?id=4582>

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# Vermont Fuel Price Report

April, 2013

Another source is the Weather Data Depot web site. The data collection is not as extensive as the NOAA collection only covering the years from 1993 forward. But the site is more user friendly.

[http://www.weatherdatadepot.com/?pi\\_ad\\_id=8426228665&gclid=ClazvMf8krQCFQgk4AodFRYArQ](http://www.weatherdatadepot.com/?pi_ad_id=8426228665&gclid=ClazvMf8krQCFQgk4AodFRYArQ)

A negative percentage means the Comparison Year was milder than the Base Year. A positive percentage means the Comparison Year was more severe than the Base Year. When the monthly degree days in either the base year or the comparison year are less than 30, a percentage comparison is not calculated. However, the Annual Total comparison percentages include all heating and cooling degree days.

<b><u>Monthly Degree Day Comparison (Station: VTNO)[1]</u></b>									
Month	Base Year (2011)			Comparison Year (2012)			Comparison Year (2013)		
	HDD	CDD	TDD	HDD	CDD	TDD	HDD	CDD	TDD
September	54	121	175	149	50	199			
October	348	2	350	333	0	333			
November	539	0	539	826	0	826			
December	966	0	966	1022	0	1022			
January	1400	0	1400	1151	0	1151	1307	0	1307
February	1175	0	1175	957	0	957	1102	0	1102
March	1014	0	1014	622	3	625	976		976
April	551	7	558	463	13	476			
May	138	78	216	111	86	197			
June	36	120	156	26	162	188			
July	0	284	284	0	300	300			
August	0	237	237	4	246	250			
Annual Total	6221	849	7070	5664	860	6524	3385	0	3385

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