NYSERDA Heating Fuels Report

Highlights

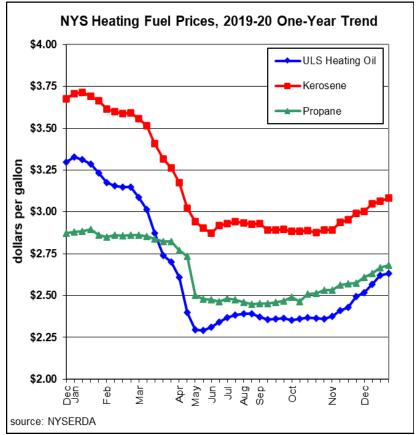
- Mid-Atlantic propane inventories decreased 823,000 barrels (14.2%) since last week to 4.988 million barrels. Inventories are 19.1% above the year-ago level and 21.6% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 0.2 million barrels (0.6%) since last week to 31.5 million barrels. Inventories are 64.8% above the year-ago level and 20.7% above the 5-year average.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane all increased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on December 21^{st} , prices increased 0.013/gallon (0.5%) to 2.634/gallon for ULS heating oil, 0.017/gallon (0.6%) to 3.083/gallon for kerosene and 0.017/gallon (0.6%) to 2.682/gallon for propane. Compared to a year earlier, prices decreased 0.663/gallon (20.1%) for heating oil, 0.593/gallon(16.1%) for kerosene, and 0.192/gallon (6.7%) for propane.

Crude Oil Prices—For the week ending 12/25/2020, WTI crude oil spot prices a veraged \$47.73/bbl, a decrease of \$0.24/bbl (0.5%) from the week-ago average of \$47.97/bbl. WTI prices are now \$13.56/bbl (22.1%) below the year-ago weekly average of \$61.29/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 12/25/2020, Henry Hub natural gas spot prices averaged \$2.670 per million Btu (mmBtu), the same price as the prior week. Prices are currently \$0.643/mmBtu (31.7%) above the year-earlier weekly average of \$2.028/mmBtu.

Residential Natural Gas Prices—The NYS average



price in October 2020 was 1.561/therm, a decrease of 0.304/therm (16.3%) from the September 2020 price of 1.865/therm, and was 0.074/therm (4.5%) lower than the year earlier a verage of 1.635/therm.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	12/25/2020	12/18/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	31.5	31.3	0.6%	19.1	64.8%	26.1	20.7%
Non-road Diesel (15-500 ppm)	0.8	0.8	-0.7%	1.1	-30.4%	1.2	-38.5%
High Sulfur Distillate (>500 ppm)	1.8	1.9	-4.7%	2.9	-38.5%	3.5	-47.8%
Total Distillate Oil	34.1	34.0	0.3%	23.2	47.2%	30.8	10.6%
Propane	4.988	5.811	-14.2%	4.187	19.1%	4.103	21.6%
#6 Residual Oil	6.2	6.1	1.2%	5.8	5.8%	6.1	0.6%
US Natural Gas	3,460	3,574	-3.2%	3,209	7.8%	3,254	6.3%
US Crude Oil	493.5	499.5	-1.2%	429.9	14.8%	448.9	9.9%

Notes: Natural Gas in billion cubic feet (Bcf); Middle Atlantic is DE, DC, MD, NJ, NY, and PA

ppm = parts per million sulfur content

Source: US DOE/EIA



REGIO N	12/28/2020	12/14/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	2.827	2.815	0.4%	3.503	-19.3%
New York City	2.800	2.795	0.2%	3.394	-17.5%
Lower Hudson	2.710	2.689	0.8%	3.383	-19.9%
Upper Hudson	2.513	2.496	0.7%	3.161	-20.5%
Capital District*	2.325	2.323	0.1%	2.992	-22.3%
North Country*	2.520	2.508	0.5%	3.281	-23.2%
Central	2.430	2.412	0.7%	3.076	-21.0%
Western*	2.757	2.740	0.6%	3.423	-19.5%
State wide *	2.634	2.621	0.5%	3.297	-20.1%
New York S	tate Retail Propane P	osted Credit Prices -	1,100 gallon usage c	ategory (dollars pe	er gallon)
Long Island	3.194	3.153	1.3%	3.197	-0.1%
Mid-Hudson*	2.811	2.810	0.0%	2.814	-0.1%
Capital District*	2.545	2.542	0.1%	2.738	-7.0%
North Country*	2.848	2.830	0.6%	3.701	-23.0%
Central*	2.541	2.521	0.8%	2.601	-2.3%
Western*	2.491	2.457	1.4%	2.570	-3.1%
State wide *	2.682	2.665	0.6%	2.874	-6.7%
	New York State Re	tail Kerosene Posted	Credit Prices (dolla	rs per gallon)	
Mid-Hudson	3.180	3.199	-0.6%	3.798	-16.3%
Capital District	2.887	2.903	-0.6%	3.421	-15.6%
North Country	3.129	3.024	3.5%	3.747	-16.5%
Central	2.971	2.957	0.5%	3.526	-15.7%
Western	3.212	3.168	1.4%	3.835	-16.2%
Statewide	3.083	3.066	0.6%	3.676	-16.1%
	New York State	Average Residential	Natural Gas Prices	(\$/therm)	
REGIO N	October 2020	September 2020	% Change vs. Prior Month	October 2019	% Change vs. Last Year
Statewide	1.561	1.865	-16.3%	1.635	-4.5%

* Revision

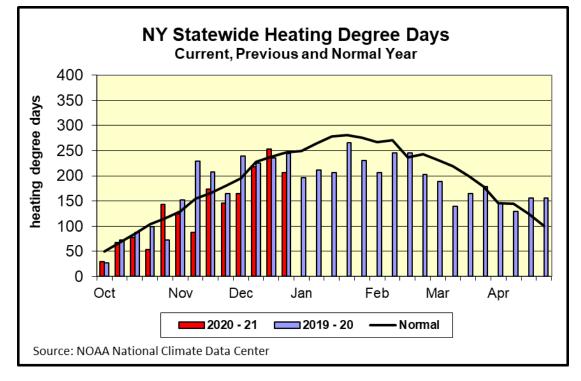
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

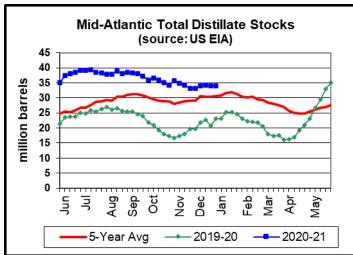
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

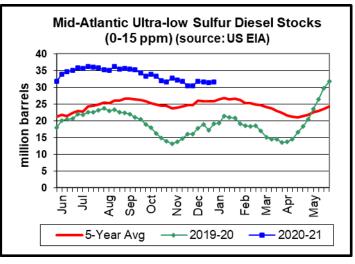
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, and Washington North Country: Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence, and Warren Central: Broome, Cayuga, Chenango, Cortland, Delaware, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tioga, and Tompkins Western: Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Nia gara, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates counties. Propane & Kerosene: Mid-Hudson: Columbia, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties. B5 heating oil is required for Downstate New York including Nassau, Suffolk, NYC, and Westchester counties. **Heating Degree Days**— On a statewide basis during the past week, the number of heating degree-days (207) was 15.2% below the year-ago level (244) and 16.2% below the normal trend (247). On a cumulative basis since October 1st, current year heating degree-days (1,744) are behind the year-ago level (2,056) by 15.2% and behind the normal trend (1,960) by 11.0%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending December 26				Cumulative From October 1			
Region	2020	2019	Normal	2020-21	2019-20	Normal	
Albany	214	271	260	2,137	2,168	2,129	
Binghamton	239	254	277	2,075	2,424	2,325	
Buffalo	211	206	258	1,790	2,131	2,103	
Glens Falls	187	310	296	1,531	2,518	2,442	
Massena	230	297	323	2,226	2,677	2,598	
NYC	161	187	202	1,114	1,457	1,472	
Rochester	210	221	260	1,865	2,182	2,119	
Syracuse	202	250	267	1,814	2,174	2,159	
Watertown	209	268	296	2,070	2,505	2,424	
Statewide	207	244	247	1,744	2,056	1,960	

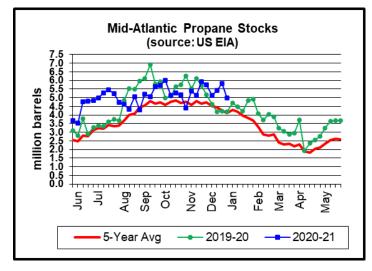


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

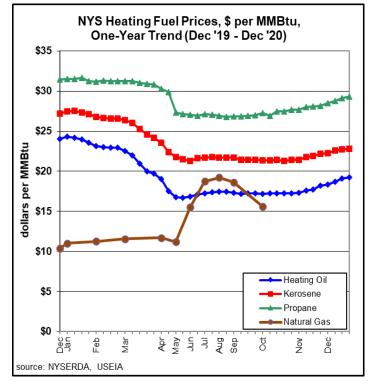




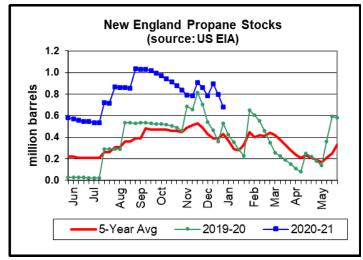
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



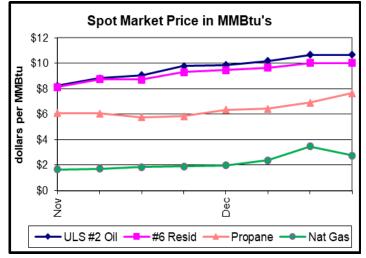
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months. The monthly average price of natural gas is higher during the summer months due to low delivery volumes and fixed delivery charges and does not necessarily indicate a higher underlying supply price. Higher a verage natural gas prices in the summer months are not indicative of higher future prices during the winter months.



Spot Btu Price Equivalents—The Btu spot market graph equates the spot market price, in table below, for NY Harbor ultra-low sulfur diesel fuel and 0.3% sulfur high pour #6 residual fuel, Mont Belvieu propane, and the New York Citygate natural gas price on a dollar per million Btu (MMBtu) basis.



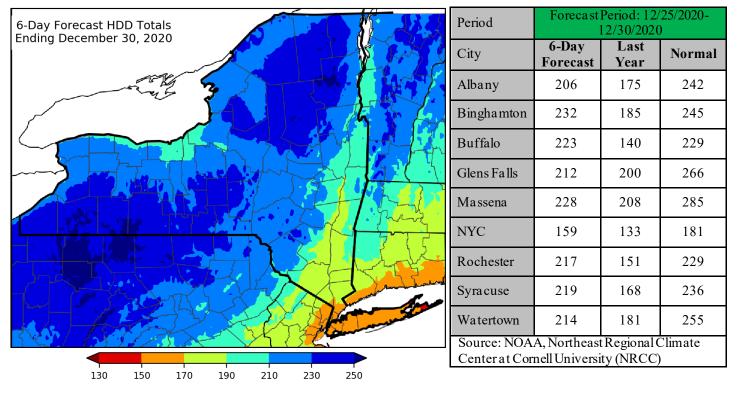
New York Spot Prices, Weekly Average						
Fuel	12/25/2020	Year Ago	% Change			
Ultra LS Diesel	1.479	2.037	-27.4%			
#2 Fuel Oil	1.398	2.020	-30.8%			
#6 Residual 0.3%	1.501	2.193	-31.6%			
Propane	0.699	0.462	51.4%			
Natural Gas	2.769	2.343	18.2%			

Note: Fuel in \$/gallon, natural gas (\$/MMBtu)=NYCitygate

Weather Outlooks – Based on data and maps provided by the National Oceanic and Atmospheric Administration (NOAA) and the Northeast Regional Climate Center at Cornell University (NRCC).

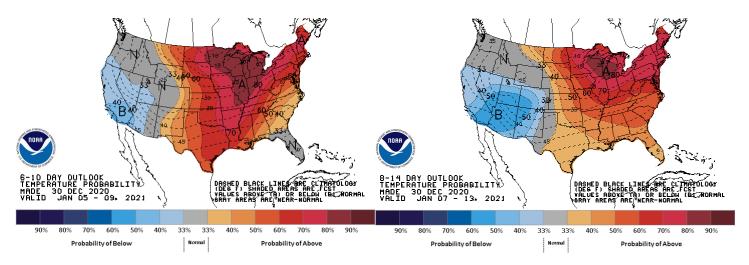
Statewide Forecast HDD: On a statewide basis for the week ending January 2^{nd} , the number of forecasted heating degree-days (206) is 10.8% above last year (186) and 19.5% below the normal trend (256). Regional HDD forecasts are provided in the map and table below.

Regional Heating Degree-Day Forecast



6-10 Day Outlook Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 6-10 day temperature probability outlook for the United States for January 5, 2021 – January 9, 2021. This is in comparison to the 30-year normal (1981-2010).

8-14 Day Outlook Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 8-14 day temperature probability outlook for the United States for January 7, 2021 – January 13, 2021. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is a vailable at NYSERDA's website. For more information please contact Matthew Milford at (518) 862-1090 ext. 3416, e-mail <u>matthew.milford@nyserda.ny.gov.</u>