NYSERDA Heating Fuels Report

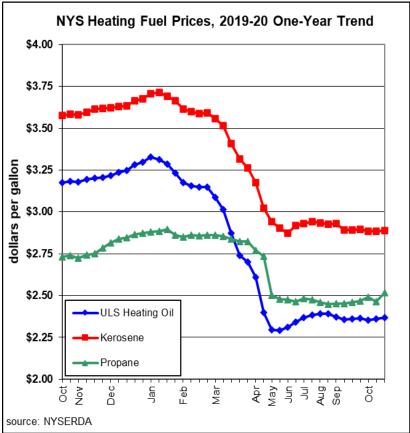
Highlights

- Mid-Atlantic propane inventories increased 159,000 barrels (3.1%) since last week to 5.291 million barrels. Inventories are 6.0% below the year-ago level and 9.4% above the 5-year average.
- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 1.2 million barrels (3.8%) since last week to 32.0 million barrels. Inventories are 113.8% above the year-ago level and 29.5% 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 October 12^{th} , prices increased 0.006/gallon (0.3%) to 2.367/gallon for ULS heating oil, 0.007/gallon (0.2%) to 2.890/gallon for kerosene and 0.054/gallon (2.2%) to 2.517/gallon for propane. Compared to a year earlier, prices decreased 0.808/gallon (25.4%) for heating oil, 0.687/gallon(19.2%) for kerosene, and 0.214/gallon (7.8%) for propane.

Crude Oil Prices—For the week ending 10/16/2020, WTI crude oil spot prices a veraged \$40.33/bbl, an increase of \$0.14/bbl(0.3%) from the week-ago average of \$40.19/bbl. WTI prices are now \$13.16/bbl (24.6%) below the year-ago weekly average of \$53.49/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 10/16/2020, Henry Hub natural gas spot prices averaged \$2.174 per million Btu (mmBtu), an increase of \$0.260/mmBtu (13.6%) from the prior week level of \$1.914/mmBtu. Prices are currently \$0.034/mmBtu (1.5%) below the year-earlier week ly a verage of \$2.208/mmBtu.



 $\label{eq:residential Natural Gas Prices} The NYS a verage price in July 2020 was $1.874/therm, an increase of $0.319/therm (20.5\%) from the June 2020 price of $1.555/therm, and was $0.049/therm (2.5\%) lower than the year earlier a verage of $1.923/therm.$

Middle Atlantic Stocks-	-Current and historic h	eating fuel inventor	y data is presented	d in the table below.
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Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	10/16/2020	10/9/2020	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	32.0	33.2	-3.8%	15.0	113.8%	24.7	29.5%
Non-road Diesel (15-500 ppm)	0.8	0.8	4.6%	0.5	60.5%	1.1	-22.3%
High Sulfur Distillate (>500 ppm)	2.2	1.9	19.2%	2.5	-9.7%	3.3	-31.5%
Total Distillate Oil	35.1	35.9	-2.4%	18.0	95.1%	29.1	20.7%
Propane	5.291	5.132	3.1%	5.626	-6.0%	4.835	9.4%
#6 Residual Oil	6.8	6.6	2.0%	6.0	13.0%	6.1	11.3%
US Natural Gas	3,926	3,877	1.3%	3,581	9.6%	3,599	9.1%
US Crude Oil	488.1	489.1	-0.2%	433.2	12.7%	445.2	9.6%

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	10/19/2020	10/12/2020	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island*	2.563	2.545	0.7%	3.363	-23.8%
New York City	2.522	2.517	0.2%	3.327	-24.2%
Lower Hudson	2.330	2.324	0.3%	3.201	-27.2%
Upper Hudson	2.215	2.193	1.0%	3.018	-26.6%
Capital District	2.129	2.132	-0.1%	2.896	-26.5%
North Country	2.331	2.348	-0.7%	3.203	-27.2%
Central	2.137	2.142	-0.2%	2.914	-26.7%
Western	2.614	2.614	0.0%	3.345	-21.9%
Statewide*	2.367	2.361	0.3%	3.175	-25.4%
New York S	tate Retail Propane Po	sted Credit Prices -	· 1,100 gallon usage ca	ntegory (dollars p	er gallon)
Long Island	3.083	3.061	0.7%	3.075	0.3%
Mid-Hudson	2.693	2.689	0.1%	2.734	-1.5%
Capital District	2.331	2.313	0.8%	2.522	-7.6%
North Country	2.660	2.421	9.9%	3.490	-23.8%
Central	2.321	2.286	1.5%	2.455	-5.5%
Western	2.349	2.342	0.3%	2.453	-4.2%
Statewide	2.517	2.463	2.2%	2.731	-7.8%
	New York State Ret	ail Kerosene Postec	l Credit Prices (dollar	s per gallon)	
Mid-Hudson	2.946	2.914	1.1%	3.666	-19.6%
Capital District	2.738	2.738	0.0%	3.329	-17.8%
North Country	2.974	2.983	-0.3%	3.688	-19.4%
Central	2.698	2.724	-1.0%	3.396	-20.6%
Western	3.130	3.108	0.7%	3.801	-17.7%
Statewide	2.890	2.883	0.2%	3.577	-19.2%
	New York State	Average Residentia	l Natural Gas Prices ((\$/therm)	
REGIO N	July 2020	June 2020	% Change vs. Prior Month	July 2019	% Change vs. Last Year
Statewide	1.874	1.555	20.5%	1.923	-2.5%

* Revision

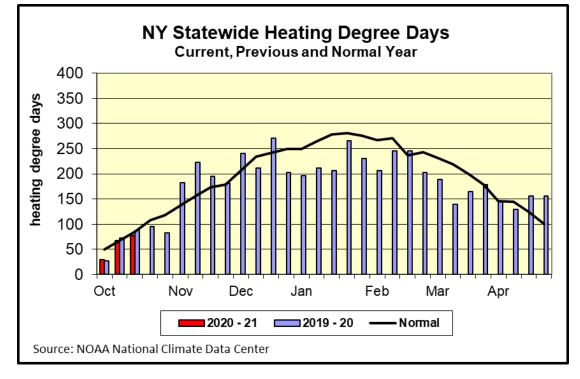
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

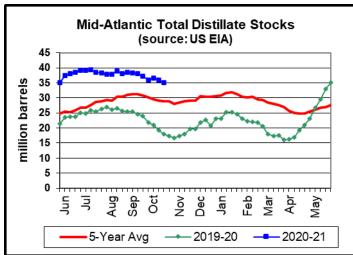
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

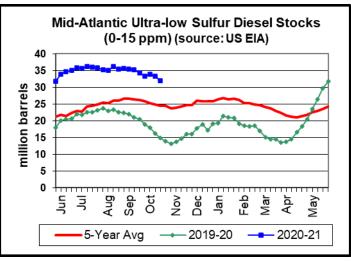
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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 (77) was 12.5% below the year-ago level (88) and 9.4% below the normal trend (85). On a cumulative basis since October 1st, current year heating degree-days (175) are behnind the year-ago level (187) by 6.4% and behind the normal trend (203) by 13.8%.

New York State Heating Degree Day Information, Weekly & Cumulative						
Week Ending October 17			Cumulative From October 1			
Region	2020	2019	Normal	2020-21	2019-20	Normal
Albany	107	87	100	242	201	243
Binghamton	111	115	112	254	261	283
Buffalo	78	98	96	191	215	236
Glens Falls	45	116	120	84	286	303
Massena	118	114	123	282	310	310
NYC	38	28	52	57	64	116
Rochester	89	100	98	215	203	240
Syracuse	88	98	100	198	215	248
Watertown	116	110	117	262	275	297
Statewide	77	88	85	175	187	203

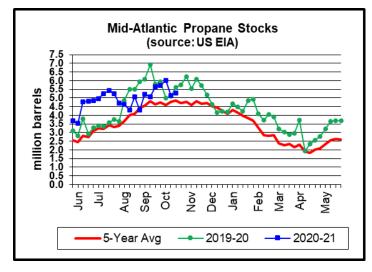


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

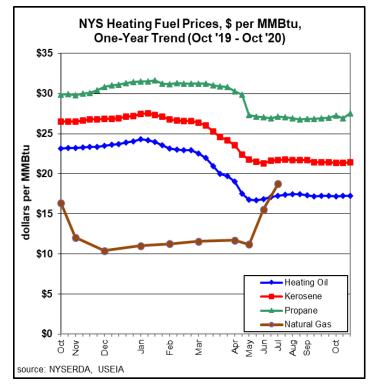




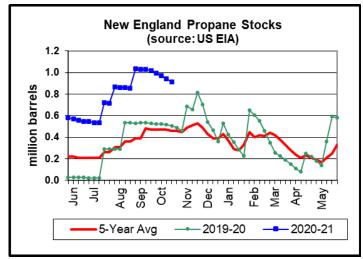
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



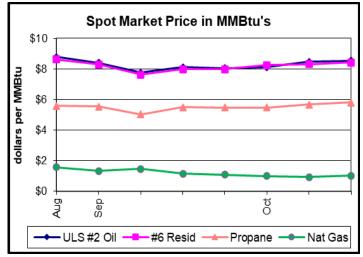
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



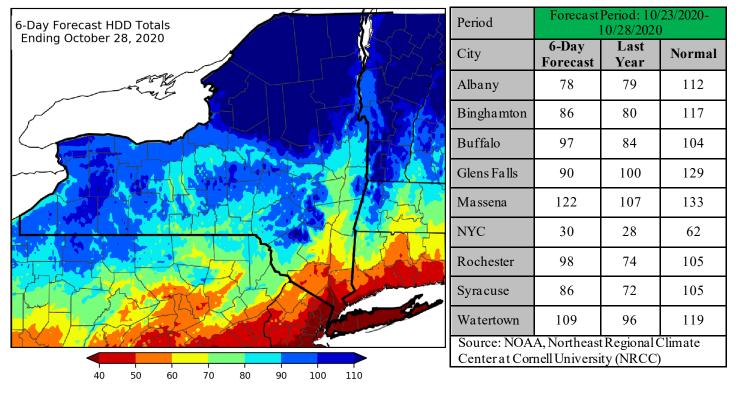
New York Spot Prices, Weekly Average							
Fuel	10/16/2020	Year Ago	% Change				
Ultra LS Diesel	1.183	1.948	-39.3%				
#2 Fuel Oil	1.133	1.925	-41.2%				
#6 Residual 0.3%	1.263	1.885	-33.0%				
Propane	0.531	0.464	14.5%				
Natural Gas	1.003	1.532	-34.5%				

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).

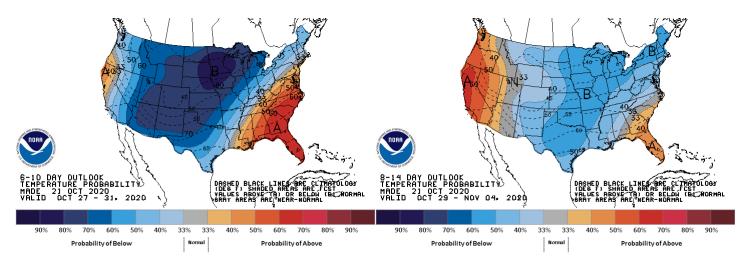
Statewide Forecast HDD: On a statewide basis for the week ending October 24th, the number of forecasted heating degree-days (39) is 55.2% below last year (87) and 62.5% below the normal trend (104). Regional HDD forecasts are provided in the map and table below.

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 October 27, 2020– October 31, 2020. 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 October 29, 2020–November 4, 2020. 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>