## NYSERDA Heating Fuels Report

## November 29, 2021

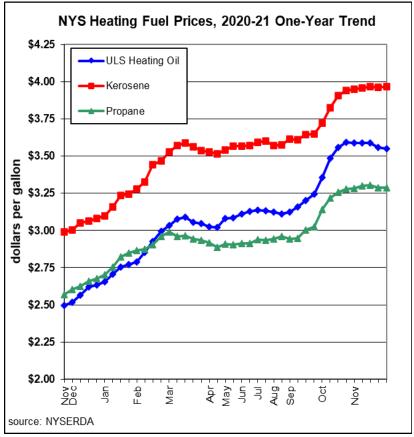
## **Highlights**

- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 1.6 million barrels (9.3%) since last week to 18.8 million barrels. Inventories are 38.3% below the year-ago level and 24.6% below the 5-year average.
- The weekly average U.S. WTI crude oil spot price decreased \$1.20 per barrel (1.5%) since last week to \$77.79 per barrel. Current prices are \$33.39 per barrel (75.2%) above the year-ago weekly average of \$44.40 per barrel.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil and propane decreased while the average retail price of kerosene increased since the last survey.

**Retail Petroleum Prices**—On a statewide basis since the last survey on November  $22^{nd}$ , the price decreased 0.012/gallon (0.3%) to 3.549/gallon for ULS heating oil, increased 0.005/gallon (0.1%) to 3.968/gallon for kerosene, and the price decreased 0.001/gallon (0.0%)to 3.288/gallon for propane. Compared to a year earlier, prices increased 1.055/gallon (42.3%) for heating oil, 0.976/gallon (32.6%) for kerosene, and 0.717/gallon (27.9%) for propane.

**Crude Oil Prices**—For the week ending 11/26/2021, WTI crude oil spot prices averaged \$77.79/bbl, a decrease of \$1.20/bbl (1.5%) from the week-ago average of \$78.99/bbl. WTI prices are now \$33.39/bbl (75.2%) above the year-ago weekly average of \$44.40/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 11/26/2021, Henry Hub natural gas spot prices averaged \$4.863 per million Btu (MMBtu), a decrease of \$0.019/MMBtu (0.4%) from the prior week level of \$4.882/MMBtu. Prices are currently \$2.616/MMBtu (116.4%) above the year-earlier weekly average of \$2.247/MMBtu.



**Residential Natural Gas Prices**—The NYS average price in September 2021 was \$2.148/therm, a decrease of \$0.089/therm (4.0%) from the August 2021 price of \$2.237/therm, and was \$0.285/therm (15.3%) higher than the year earlier average of \$1.863/therm.

Middle Atlantic Stocks-	-Current and historic h	neating fuel inventory	data is presented in the table below.

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	11/26/2021	11/19/2021	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	18.8	17.2	9.3%	30.5	-38.3%	25.0	-24.6%
Non-road Diesel (15-500 ppm)	0.4	0.4	-5.6%	0.6	-35.4%	1.0	-58.3%
High Sulfur Distillate ( >500 ppm)	2.1	2.1	-2.0%	2.1	-2.6%	3.0	-31.4%
Total Distillate Oil	21.3	19.8	7.8%	33.3	-35.9%	29.0	-26.4%
Propane	5.979	6.130	-2.5%	5.729	4.4%	5.002	19.5%
#6 Residual Oil	4.0	3.8	5.9%	6.8	-40.6%	6.2	-34.5%
US Natural Gas	3,564	3,623	-1.6%	3,939	-9.5%	3,650	-2.4%
US Crude Oil	433.1	434.0	-0.2%	488.0	-11.3%	465.5	-7.0%

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



<b>REGIO</b> N	11/29/2021	11/22/2021	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.705	3.711	-0.2%	2.688	37.8%
New York City	3.624	3.682	-1.6%	2.641	37.2%
Lower Hudson	3.610	3.621	-0.3%	2.503	44.2%
Upper Hudson	3.424	3.423	0.0%	2.382	43.7%
Capital District	3.356	3.358	-0.1%	2.218	51.3%
North Country	3.464	3.461	0.1%	2.382	45.4%
Central	3.364	3.370	-0.2%	2.310	45.6%
Western	3.729	3.736	-0.2%	2.669	39.7%
Statewide	3.549	3.561	-0.3%	2.494	42.3%
New York	State Retail Propane Pos	sted Credit Prices -	1,100 gallon usage	category (dollars pe	r gallon)
Long Island	3.997	4.001	-0.1%	3.042	31.4%
Mid-Hudson	3.539	3.539	0.0%	2.759	28.3%
Capital District	3.062	3.075	-0.4%	2.418	26.6%
North Country	3.344	3.333	0.3%	2.710	23.4%
Central	3.133	3.155	-0.7%	2.405	30.3%
Western	3.043	3.022	0.7%	2.379	27.9%
Statewide	3.288	3.289	0.0%	2.571	27.9%
	New York State Reta	il Kerosene Posted	Credit Prices (dolla	ars per gallon)	
Mid-Hudson	3.990	3.979	0.3%	3.091	29.1%
Capital District	3.863	3.867	-0.1%	2.816	37.2%
North Country	3.864	3.859	0.1%	3.011	28.3%
Central	3.935	3.926	0.2%	2.874	36.9%
Western	4.233	4.233	0.0%	3.131	35.2%
Statewide	3.968	3.963	0.1%	2.992	32.6%
	New York State A	Average Residentia	l Natural Gas Prices	s (\$/therm)	2
REGIO N	September 2021	August 2021	% Change vs. Prior Month	September 2020	% Change vs. Last Year
Statewide	2.148	2.237	-4.0%	1.863	15.3%

\* Revision

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

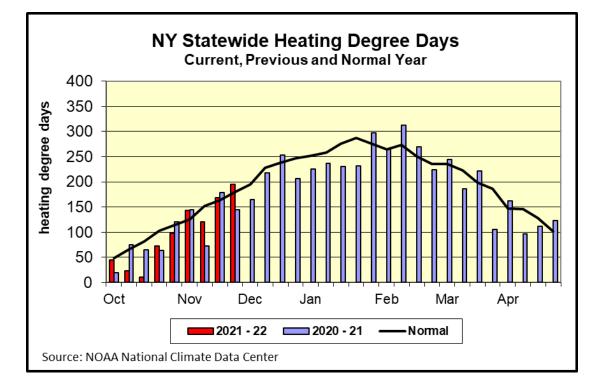
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

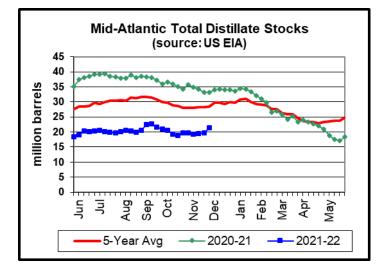
**Residential Natural Gas Prices:** Statewide average prices are derived from US EIA most currently available data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

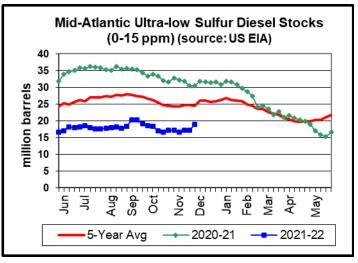
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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, Niagara, 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 (195) was 35.4% above the year-ago level (144) and 8.3% above the normal trend (180). On a cumulative basis since October 1<sup>st</sup>, current year heating degree-days (877) are behind the year-ago level (882) by 0.6% and behind the normal trend (1,033) by 15.1%.

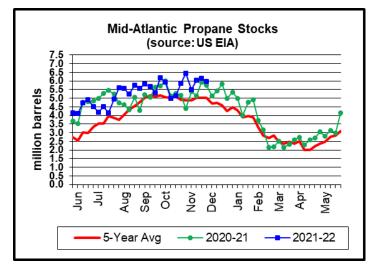
New York State Heating Degree Day Information, Weekly & Cumulative						
Week Ending November 27			Cumulative From October 1			
Region	2021	2020	Normal	2021-22	2020-21	Normal
Albany	212	189	193	977	1,129	1,155
Binghamton	233	169	211	1,100	1,064	1,282
Buffalo	189	157	193	838	895	1,133
Glens Falls	165	142	216	563	664	1,339
Massena	239	205	233	1,203	1,228	1,397
NYC	144	77	141	492	451	724
Rochester	195	149	194	909	947	1,141
Syracuse	198	136	196	844	911	1,161
Watertown	217	164	216	1,013	1,095	1,320
Statewide	195	144	180	877	882	1,033



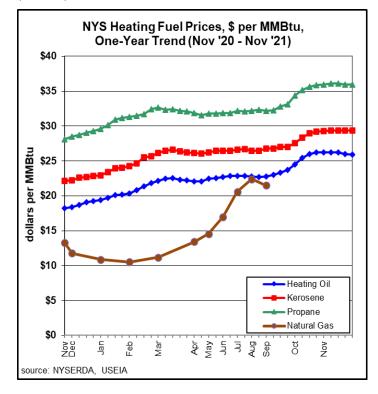




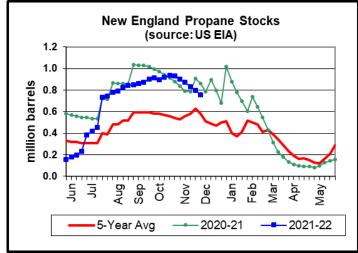
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



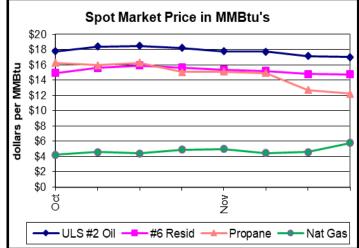
**Retail Btu Price Equivalents**—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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 average 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.



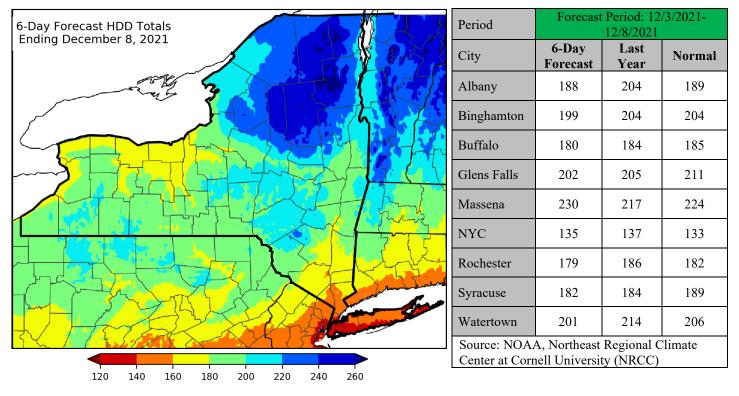
New York Spot Prices, Weekly Average							
Fuel	11/26/2021	Year Ago	% Change				
Ultra LS Diesel	2.363	1.359	73.9%				
#2 Fuel Oil	2.223	1.274	74.4%				
#6 Residual 0.3%	2.212	1.392	58.9%				
Propane	1.117	0.535	108.8%				
Natural Gas	5.791	1.917	202.2%				

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).

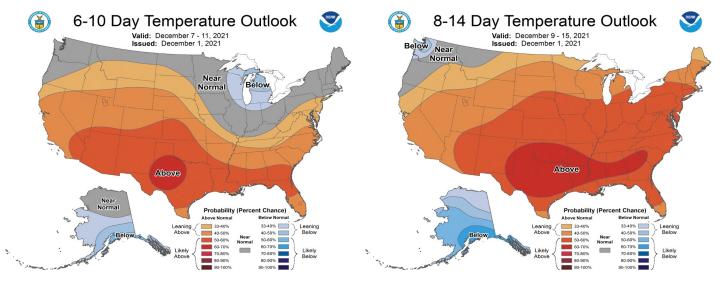
**Statewide Forecast HDD**: On a statewide basis for the week ending December 4<sup>th</sup>, the number of forecasted heating degree-days (196) is 30.7% above last year (150) and 0.5% above the normal trend (195). Regional HDD forecasts are provided in the map and table below.

## **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 December 7, 2021 – December 11, 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 December 9, 2021 – December 15, 2021. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is available 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>