January 27, 2023

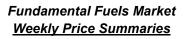


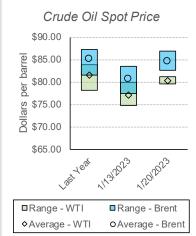
Overall Energy & Fuels Markets Summary

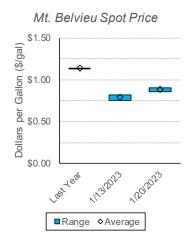
- Crude oil, propane, and natural gas (Henry Hub) weekly average spot prices compared to the previous week (see page 1):
 - WTI/Brent (crude oil) and propane (Mt. Belvieu) increased
 - Natural gas at Henry Hub slightly decreased.
- Regional fuels inventories (see pages 2 and 3) varied compared to the previous week:
 - Ultra-low sulfur diesel (ULSD), total gasoline, and propane inventories increased.
 - ULSD inventories remain below the 5-year range.
- Market influencers include:
 - Global factors include the ongoing Russian invasion of Ukraine, warm winter in Europe, and COVID-19 in China.
 - Weather forecast for NY indicating a potential return to normal winter temperatures (see page 6). The warmer winter temperatures to date have decreased demand on heating fuels.
- NY retail prices (see pages 4 and 5) for gasoline, diesel, heating oil, propane, and kerosene remain elevated compared to last year:
 - NY retail prices for heating oil, propane, and kerosene slightly increased compared to the prior week.
 - NY transportation gasoline and diesel fuel retail prices remained comparable to the prior week.

Issue Contents:

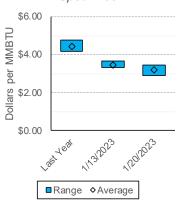
National crude and East Region natural gas inventories	Page 2
Regional Inventories: Select Liquid Fuels	Page 3
Transportation Fuels Prices Summary	Page 4
Heating Fuel Prices Summary	. Page 5
Weather Outlook	Page 6
Degree Days Outlook and Summary	. Page 7
References	. Page 8











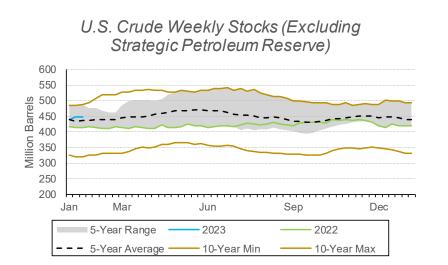
Note

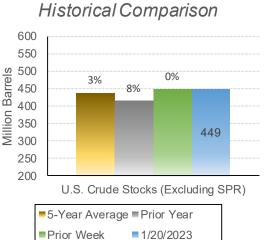
^{1.} Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

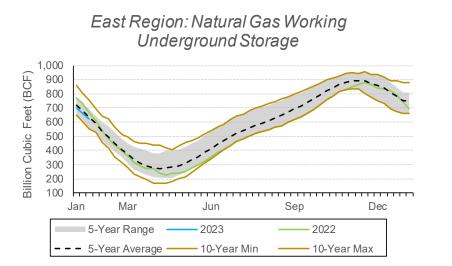
^{2.} Graphics summarize available USEIA data from the most recent week ending on Fridays, noted by the date.



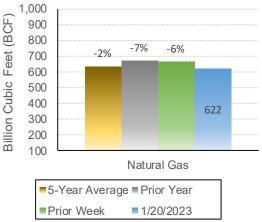
National Crude and East Region Natural Gas Inventories







Historical Comparison

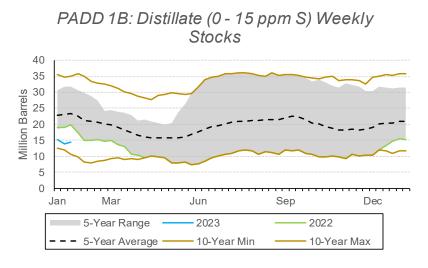


Note:

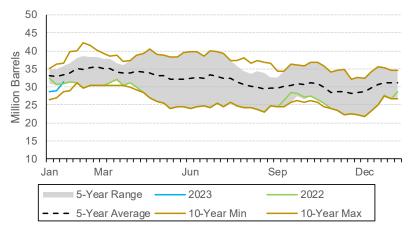
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater, negative values indicate current week is less than the historical value.



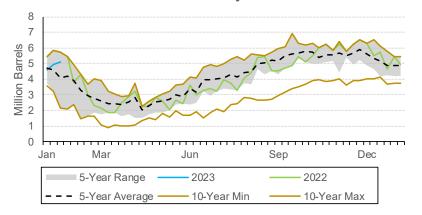
Regional Inventories: Select Liquid Fuels



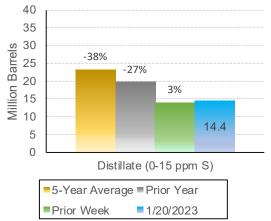
PADD 1B: Total Gasoline Weekly Stocks



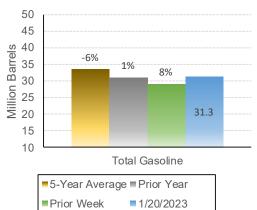
PADD 1B: Propane and Propylene Weekly Inventory



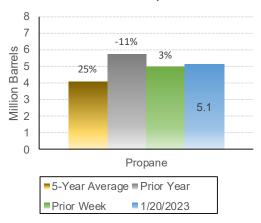




Historical Comparison



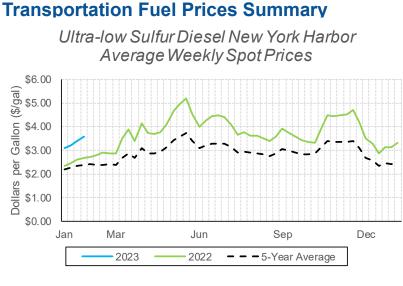
Historical Comparison



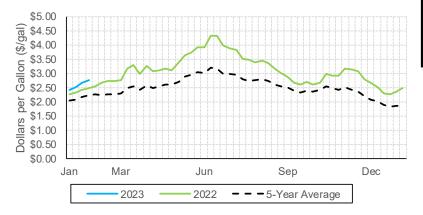
Notes:

- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater, negative values indicate current week is less than the historical value.





Conventional Gasoline Average Weekly Spot Prices New York Harbor



For regional NYS retail price summaries for transportation fuels, visit the following NYSERDA resources:

Transportation Fuel Dashboard

Transportation fuels retail price summaries presented in this report and on the NYSERDA dashboards are collected by the Energy Markets team from AAA and USEIA as part of our ongoing fuels markets analyses and monitoring.

Fuel Type	NYS Average Retail Prices			NYS Average Retail Price			
гиеттуре	1/20/2023	1/13/2023	% Difference	Prior Year	% Difference		
Regular Gasoline (dollars per gallon) ²	\$3.48	\$3.49	0%	\$2.42	44%		
On-road Diesel (dollars per gallon) ²	\$3.74	\$3.72	0%	\$2.80	33%		

Notes: 1. Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

2. Retail price data from AAA, see references section for detailed citations. Visualizations by NYSÉRDA.

Heating Fuel Prices Summary



No. 2 Heating Oil Average Weekly Spot Prices New York Harbor For regional NYS \$6.00 retail price summaries for heating fuels, visit the following NYSERDA resources: Home Heating Oil Prices Dashboard \$0.00 Mar Jun Sep Dec Jan 2023 2022 5-Year Average **Kerosene Prices** Dashboard Propane Mt. Belvieu Average Weekly Spot Prices Propane Prices \$1.80 Dashboard (leg \$1.60 (\$) \$1.40 . Gallon (\$1.20 Heating fuels retail price summaries \$1.00 presented in this report and on the \$0.80 \$0.80 \$0.60 NYSERDA dashboards are part of the Dollars **USEIA State Heating Oil and Propane** \$0.40 Program/NYSERDA Heating Fuel \$0.20 \$0.00 Prices surveys. Jan Mar Jun Sep Dec 2023 2022 - - - 5-Year Average

Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
weekly Sulvey Results by Fuel Type	1/23/2023	1/17/2023	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) ²	\$4.900	\$4.828	1.5%	\$3.804	28.8%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) ²	\$3.567	\$3.548	0.5%	\$3.335	7.0%
Kerosene Posted Credit Prices (dollars per gallon) ²	\$6.318	\$6.287	0.5%	\$4.239	49.1%
Monthly USEIA Reporting	October 2022	September 2022	% Difference	October 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) ³	\$2.123	\$2.732	-22.3%	\$2.227	-4.7%

Notes:

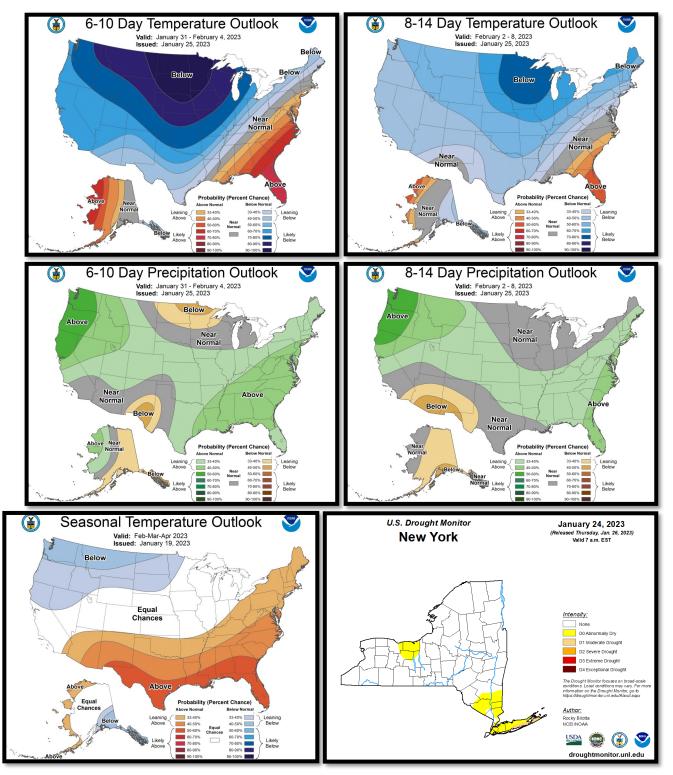
3. Residential natural gas price data from USEIA, see references section for detailed citations. Visualization by NYSERDA.

^{1.} Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

^{2.} Retail price data from USEIA & NYSERDA, see references section for detailed citations. Visualizations by NYSERDA. Highlighted cells indicate price correction from prior week.



Weather Outlook and Seasonal Threat Monitoring

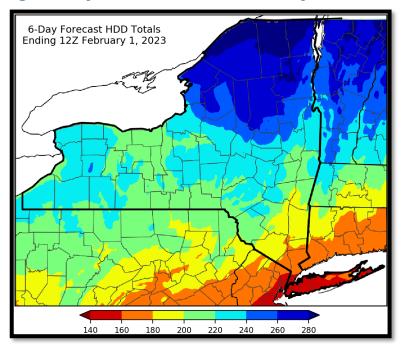


Notes:

- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for winter season. Graphics from NOAA. See reference section for detailed citation.
- 3. Seasonal threat monitoring for drought conditions during the spring/summer. Graphic from National Drought Mitigation Center. See references section for detailed citation.



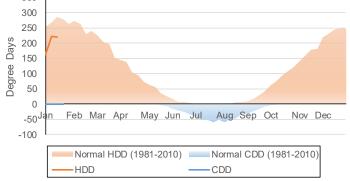
Degree Days Outlook and Summary

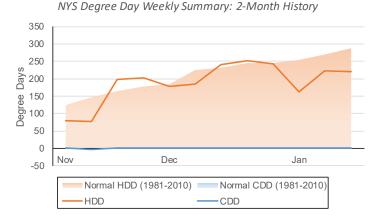


City	6-Day HDD Forecast	
Albany	205	
Binghamton	208	
Buffalo	219	
Glans Falls	226	
Massena	284	
NYC	146	
Rochester	214	
Syracuse	214	
Watertown	253	
Forecast Dates:		
01/26/2023 - 01/31/2023		

Notes: 1. M = Missing data

NYS Degree Day Weekly Summary: Current Year





For regional NYS Heating and Cooling Degree Data along with additional information, visit the following NYSERDA resources:

Heating Degree Data

<u>Monthly Degree Day Data</u> (Heating & Cooling)

Notes:

- 1. Heating degree day (HDD) forecast from NOAA & Northeast Regional Climate Center at Cornell University (NRCC). See references section for detailed citations.
- HDD and Cooling Degree Day (CDD) data from NOAA. Positive values represent HDD and negative values represent CDD. See reference section for detailed citation. Visualization by NYSERDA.



References

National and Regional Fuel Inventories

USEIA. 2022. U.S. Stocks of Crude Oil and Petroleum Products. Available online: https://www.eia.gov/dnav/pet/xls/PET_STOC_WSTK_DCU_NUS_W.xls.

USEIA. 2022. Weekly Central Atlantic (PADD 1B) Ending Stocks of Distillate Fuel Oil, 0 to 15 ppm Sulfur (Thousand Barrels. Available online: <u>https://www.eia.gov/dnav/pet/hist_xls/WD0ST_R1Y_1w.xls</u>.

USEIA. 2022. Weekly Central Atlantic (PADD 1B) Ending Stocks of Total Gasoline (Thousand Barrels). Available online: <u>https://www.eia.gov/dnav/pet/hist_xls/WGTST1B1w.xls</u>.

USEIA. 2022. Weekly Central Atlantic (PADD 1B) Propane and Propylene Ending Stocks Excluding Propylene at Terminal (Thousand Barrels). Available online: <u>https://www.eia.gov/dnav/pet/hist_xls/WPRST1B1w.xls</u>.

National and Regional Price Summaries

AAA. 2022. National and State Gas Prices. *New York Average Gas Prices*. Available online: <u>https://gasprices.aaa.com/?state=NY</u>.

USEIA. 2022. Spot Prices for Crude Oil and Petroleum Products. Available online: https://www.eia.gov/dnav/pet/xls/PET_PRI_SPT_S1_D.xls.

USEIA. 2022. Natural Gas. *Natural Gas Spot and Future Prices (NYMEX)*. Available online: <u>https://www.eia.gov/dnav/ng/xls/NG_PRI_FUT_S1_D.xls</u>.

USEIA. 2022. Natural Gas. *Natural Gas Residential Prices (Monthly).* Available online: https://www.eia.gov/dnav/ng/xls/NG PRI SUM A EPG0 PRS DMCF M.xls.

USEIA & NYSERDA. 2022. State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices Survey. Available online: <u>https://www.eia.gov/petroleum/heatingoilpropane/</u>.

Weather Outlook and Data

National Oceanic and Atmospheric Administration (NOAA). 2022. National Weather Service Climate Prediction Center. Temperature and Precipitation Outlooks. Available online: <u>https://www.cpc.ncep.noaa.gov/</u>.

NOAA and Northeast Regional Climate Center (NRCC) at Cornell University. 2022. Weekly HDD Summary for New York. Available online: <u>http://www.nrcc.cornell.edu/industry/hdd/</u>.

NOAA. National Weather Service Climate Prediction Center. Degree Days Statistics. Available online: https://www.cpc.ncep.noaa.gov/products/analysis monitoring/cdus/degree days/.

National Drought Mitigation Center. U.S. Drought Monitor. New York. Available online at: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NY.

Note that there may be slight differences between USEIA reported values and this NYSERDA summary due to methodology differences.

Developed weekly by the NYSERDA Energy Markets team, part of the Energy & Environmental Analysis Group. For any questions, please reach out to:

Brad Leach, Senior Advisor, <u>Brad.Leach@nyserda.ny.gov</u>, 518-862-1090 x3364

Joseph Osso, Jr., Project Manager, Joseph.Osso@nyserda.ny.gov, 518-862-1090 x3345