

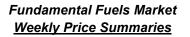
April 14, 2023

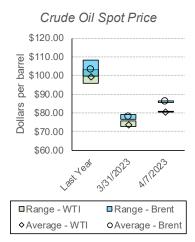
Overall Energy & Fuels Markets Summary

- Crude oil (WTI and Brent), propane (Mt. Belvieu), and natural gas (Henry Hub) weekly average spot prices all slightly increased compared to the previous week (see page 1).
 - Natural gas (Henry Hub) prices during 2023 have reached prices that have not been this low since October 2020.
- Regional fuels inventories (see pages 2 and 3) compared to the previous week:
 - Ultra-low sulfur diesel (ULSD), total gasoline, and propane inventories slightly decreased.
- Market influencers include:
 - Global factors include the ongoing Russian invasion of Ukraine, continued global economics, Petroleum Exporting Companies (OPEC), and seasonal transition.
- National Oceanic and Atmospheric Administration (NOAA) forecast for New York/Northeast to see above average temperatures over the next 1
 -2 weeks with below average precipitation (Page 6). This sets the stage for fire risk across NY and the northeast.
- NY retail prices (see pages 4 and 5) for heating and transportation fuels:
 - NY heating fuels prices for heating oil, propane, and kerosene all slightly decreased compared to the previous survey.
 - NY transportation gasoline remained comparable/slightly decreased compared to the prior week.

Issue Contents:

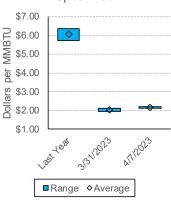
National crude and East Region natural gas inventories	Page 2
Regional Inventories: Select Liquid Fuels	Page 3
Transportation Fuels Prices Summary	.Page 4
Heating Fuel Prices Summary	Page 5
Weather Outlook	Page 6
Degree Days Outlook and Summary	. Page 7
References	Page 8







Natural Gas Henry Hub Spot Price



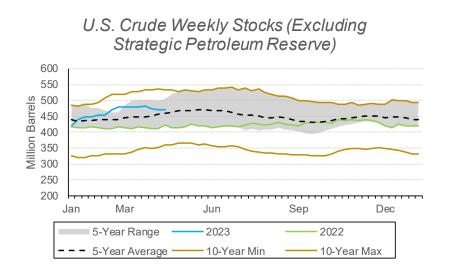
Note:

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

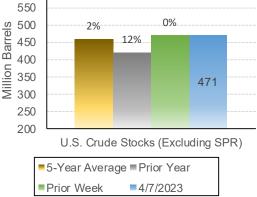
^{2.} Graphics summarize available USEIA data from the most recent week ending on Fridays, noted by the date.

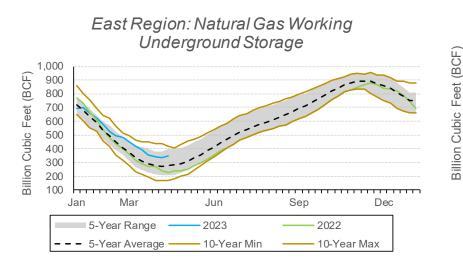


National Crude and East Region Natural Gas Inventories

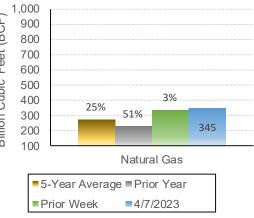








Historical Comparison

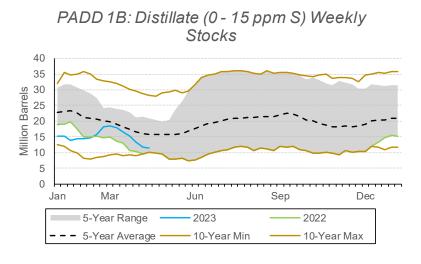


Note:

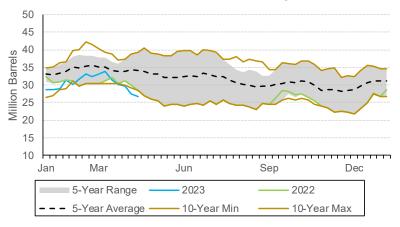
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

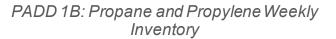


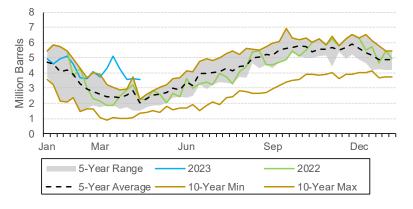
Regional Inventories: Select Liquid Fuels



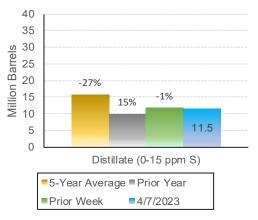
PADD 1B: Total Gasoline Weekly Stocks



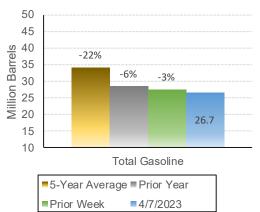




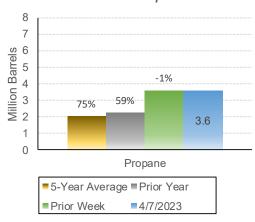
Historical Comparison



Historical Comparison



Historical Comparison



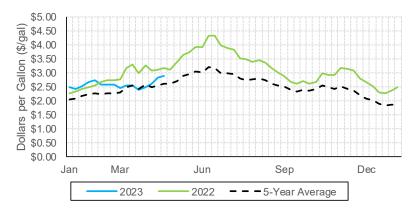
Notes:

- 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.



Transportation Fuel Prices Summary Ultra-low Sulfur Diesel New York Harbor Average Weekly Spot Prices





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				
гиеттуре	4/7/2023	3/31/2023	% Difference	Prior Year	% Difference
Regular Gasoline (dollars per gallon) ²	\$4.28	\$4.34	-1.3%	\$2.90	47.6%
On-road Diesel (dollars per gallon) ²	\$5.31	\$5.34	-0.6%	\$3.16	68.1%

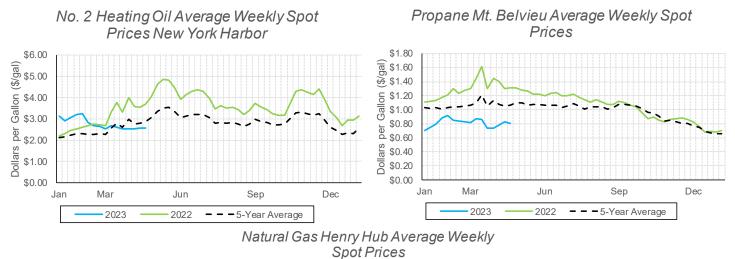
Notes:

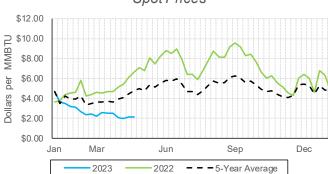
2. Retail price data from AAA, see references section for detailed citations. Visualizations by NYSERDA.

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



Heating Fuel Prices Summary





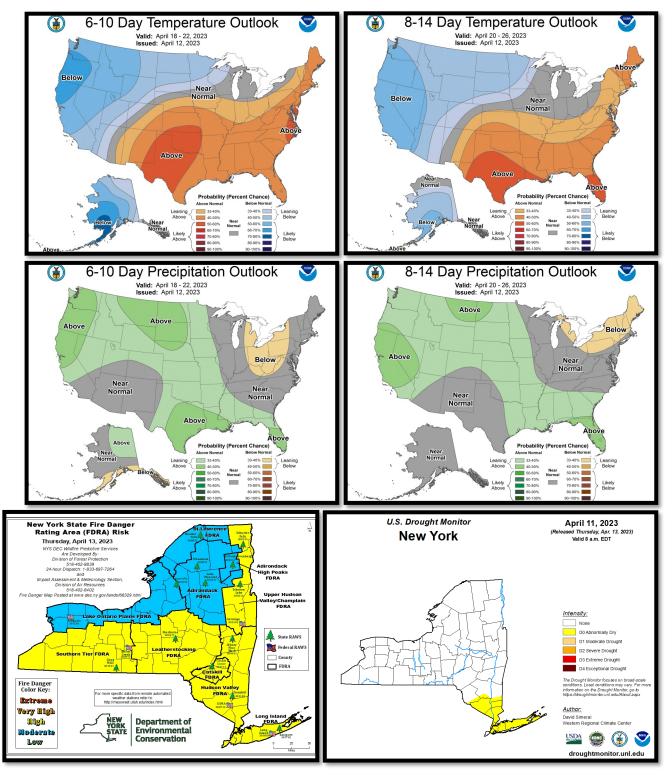
Weekly Survey Begulte by Fuel Type	NYS Average Retail Prices				
Weekly Survey Results by Fuel Type 4/		3/27/2023	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) ²	\$4.259	\$4.321	-1.5%	\$5.109	-16.6%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) ²	\$3.432	\$3.462	-0.9%	\$3.687	-6.9%
Kerosene Posted Credit Prices (dollars per gallon) ²	\$5.705	\$5.780	-1.3%	\$5.780	-1.3%
Monthly USEIA Reporting	January 2023	December 2022	% Difference	December 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) ³	\$1.665	\$1.621	2.7%	\$1.410	18.1%
For regional NYS retail price summaries for heating fuels, visit the following NYSERDA resources: <u>Home Heating Oil Prices Dashboard</u>		During the non-heating season (April through September), the retail price surveys are only conducted twice per month. Rows shaded blue in the table above indicate data that are from the most recent survey, but not reflective of the current week.			
Kerosene Prices Dashboard <u>Propane Prices Dashboard</u> Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the		 Notes: Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA. Retail price data from USEIA & NYSERDA, see references section for detailed citations. Visualizations by NYSERDA. Highlighted cells indicate price correction from prior week. 			
USEIA State Heating Oil and Propane Program/		3. Residential natural gas price data from USEIA, see refer-			

NYSERDA Heating Fuel Prices surveys.

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



Weather Outlook and Seasonal Threat Monitoring

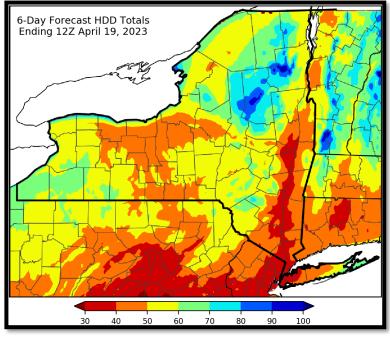


Notes:

- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for spring/summer. Graphics from NYSDEC. See reference section for detailed citation.
- 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



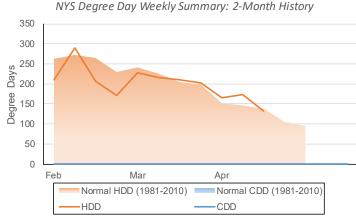
City	6-Day HDD Forecast	Normal	% Difference	
Albany	32	103	-69%	
Binghamton	40	123	-67%	
Buffalo	46	117	-61%	
Glens Falls	40	122	-67%	
Massena	57	132	-57%	
NYC	27	70	-61%	
Rochester	38	110	-65%	
Syracuse	36	113	-68%	
Watertown	44	131	-66%	

Forecast Dates: 04/13/2023 - 04/18/2023

Notes: 1. M = Missing data

350 300 250 Degree Days 200 150 100 50 0 an Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec -50 -100 Normal HDD (1981-2010) Normal CDD (1981-2010) HDD CDD

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. 2023. 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. 2023. 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. 2023. 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. 2023. 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. 2023. National and State Gas Prices. *New York Average Gas Prices*. Available online: <u>https://gasprices.aaa.com/?state=NY</u>.

USEIA. 2023. Spot Prices for Crude Oil and Petroleum Products. Available online: https://www.eia.gov/dnav/pet/xls/PET_PRI_SPT_S1_D.xls.

USEIA. 2023. 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 & NYSERDA. 2023. 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). 2023. 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. 2023. Weekly HDD Summary for New York. Available online: <u>http://www.nrcc.cornell.edu/industry/hdd/</u>.

NOAA. 2023. 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. 2023. U.S. Drought Monitor. New York. Available online at: <u>https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NY.</u>

New York State Department of Environmental Conservation (NYSDEC). 2023.New York State Fire Danger Rating Area Risk. Available online: <u>https://www.dec.ny.gov/lands/68329.html</u>.

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, Brad.Leach@nyserda.ny.gov, 518-862-1090 x3364

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