

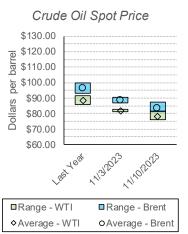
Overall Energy & Fuels Markets Summary

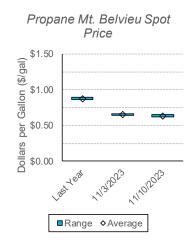
- Summary of average spot prices for the following fuels (see page 1).
 - Crude oil (WTI and Brent) and natural gas (Henry Hub) average prices decreased compared to the prior week.
 - Propane (Mt. Belvieu) average prices remained similar to the prior week.
- Regional fuels inventories (see pages 2 and 3) compared to the previous week:
 - Total gasoline inventories slightly decreased compared to the prior week.
 - Propane and ultra-low sulfur diesel (ULSD) inventories increased 9% and 10% respectively. Natural gas slightly increased.
- Market influencers include:
 - Global factors include the Russian invasion of Ukraine and the war in Israel, including the associated geopolitical uncertainties.
 - Economic concerns related to higher interest rates, late fall refinery maintenance schedules, and crude oil availability concerns continue to influence the market.
- In New York/Northeast, National Oceanic and Atmospheric Administration (NOAA) forecasts leaning below average temperatures over the next 6 -14 days. The forecast for precipitation is leaning above average over the next 6 -10 days, with a change to leaning below for the 8 -14 day outlook. (Page 6)
- NY retail prices (see pages 4 and 5) for heating and transportation fuels:
 - NY transportation regular gasoline and diesel both slightly decreased compared to the prior week.
 - Propane, kerosene and heating oil all decreased compared to the prior week.

Issue Contents:

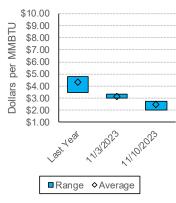
National crude and East Region natural gas inventories	age 2
Regional Inventories: Select Liquid Fuels F	Page 3
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Heating Fuel Prices Summary	Page 5

Fundamental Fuels Market <u>Weekly Price Summaries</u>





Natural Gas Henry Hub Spot Price



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

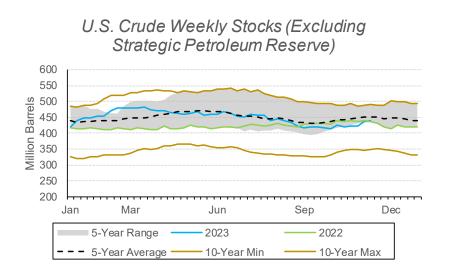


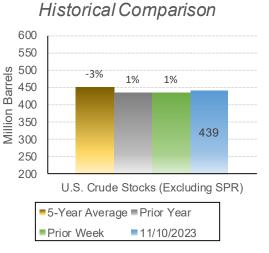
Note:

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

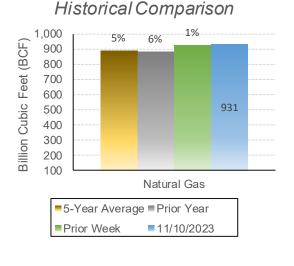


National Crude and East Region Natural Gas Inventories





East Region: Natural Gas Working Underground Storage 1,000 Billion Cubic Feet (BCF) 900 800 700 600 500 400 300 200 100 Jan Mar Jun Sep Dec 5-Year Range 2023 2022 5-Year Average 10-Year Min 10-Year Max



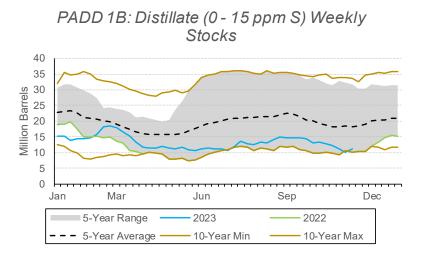
Note:

- 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.

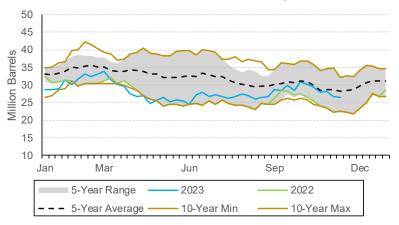
November 17, 2023

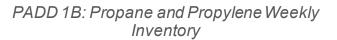


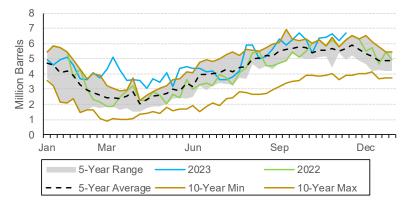
Regional Inventories: Select Liquid Fuels



PADD 1B: Total Gasoline Weekly Stocks



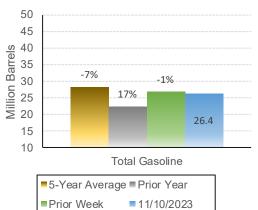




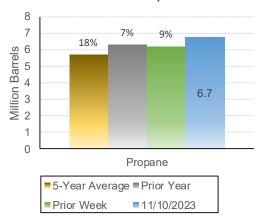
Historical Comparison



Historical Comparison



Historical Comparison



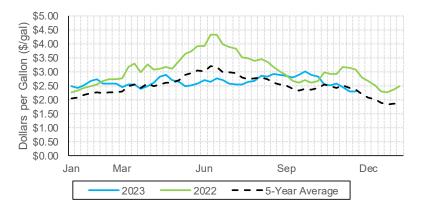
Notes:

- 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*

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				
Fuertype	11/10/2023		% Difference	Prior Year	% Difference
Regular Gasoline (dollars per gallon) ²	\$3.68	\$3.73	-1.2%	\$3.89	-5.4%
On-road Diesel (dollars per gallon) ²	\$4.67	\$4.68	-0.3%	\$5.95	-21.5%

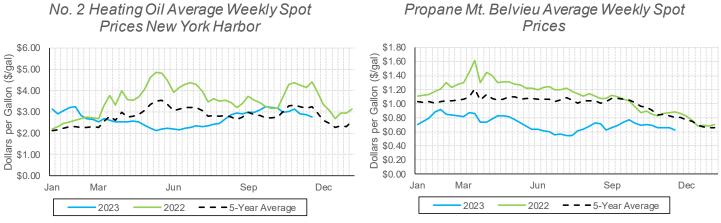
Notes:

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

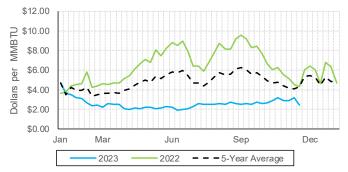
^{1.} Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.



Heating Fuel Prices Summary



Natural Gas Henry Hub Average Weekly Spot Prices



	NYS Average Retail Prices			
11/13/2023	11/6/2023	% Difference	Prior Year	% Difference
\$4.344	\$4.448	-2.3%	\$5.925	-26.7%
\$3.266	\$3.269	-0.1%	\$3.450	-5.3%
\$5.212	\$5.335	-2.3%	\$7.352	-29.1%
August 2023	July 2023	% Difference	August 2022	% Difference
\$2.197	\$2.105	4.4%	\$2.530	-13.2%
	\$4.344 \$3.266 \$5.212 August 2023	\$4.344 \$4.448 \$3.266 \$3.269 \$5.212 \$5.335 August 2023 July 2023	\$4.344 \$4.448 -2.3% \$3.266 \$3.269 -0.1% \$5.212 \$5.335 -2.3% August July % Difference	\$4.344 \$4.448 -2.3% \$5.925 \$3.266 \$3.269 -0.1% \$3.450 \$5.212 \$5.335 -2.3% \$7.352 August July % Difference August 2023 9 -0.1% 2022

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

Home Heating Oil Prices Dashboard

Kerosene Prices Dashboard

Propane Prices Dashboard

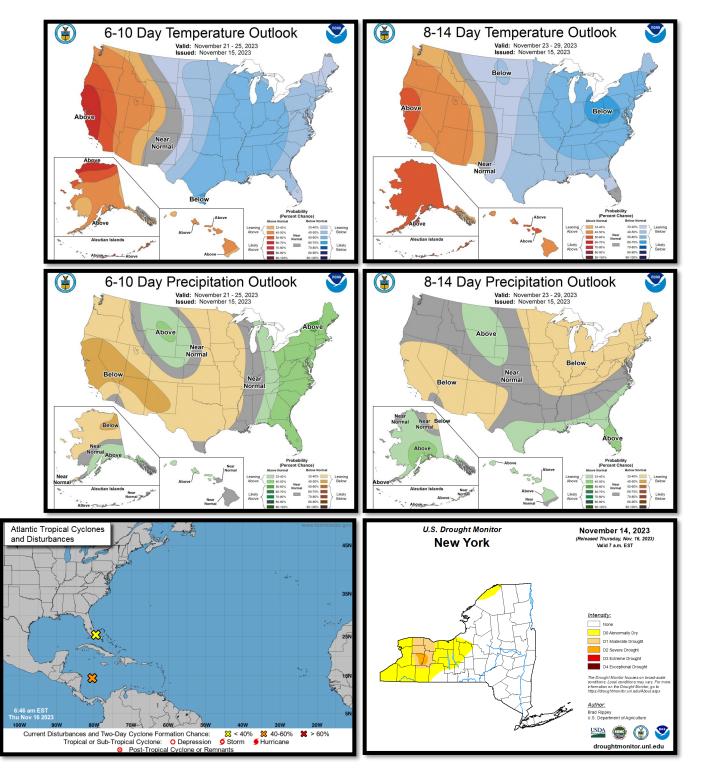
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/ NYSERDA Heating Fuel Prices surveys.

Notes:

- 1. 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.
- Residential natural gas price data from USEIA, see references section for detailed citations. Visualization by NYSERDA.



Weather Outlook and Seasonal Threat Monitoring

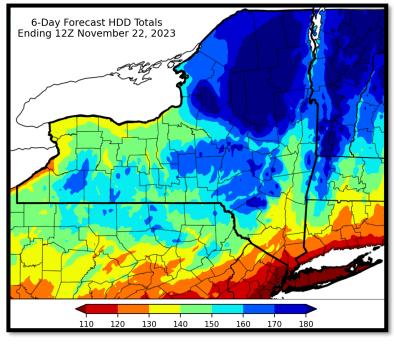


Notes:

- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for 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	Normal	% Difference
Albany	149	154	М
Binghamton	146	169	-14%
Buffalo	139	150	-7%
Glens Falls	169	174	-3%
Massena	174	183	-5%
NYC	99	102	-3%
Rochester	139	147	-5%
Syracuse	141	153	-8%
Watertown	151	168	-10%
Forecast Dat	es.		

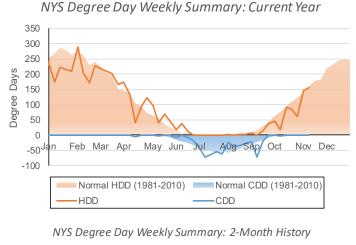
Forecast Dates:

11/16/2023 - 11/21/2023

Notes:

1. M = Missing data

We have transitioned to solely reporting heating degree days.



NYS Degree Day Weekly Summary: 2-Month History

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)

- 1. Heating degree day (HDD) forecast from NOAA & Northeast Regional Climate Center at Cornell University (NRCC). See references section for detailed citations.
- 2. 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.

Notes:



References

National and Regional Fuel Inventories

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

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>.

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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 & 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 Hurricane Center and Central Pacific Hurricane Center. *Atlantic Tropical Cyclones and Disturbances*. Available online: <u>https://www.nhc.noaa.gov/</u>.

NOAA. National Weather Service Climate Prediction Center. Degree Days Statistics. Available online: <u>https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/degree_days/</u>.

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:

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