July 21, 2023



Overall Energy & Fuels Markets Summary

- Summary of average spot prices for the following fuels (see page 1).
 - Crude oil (WTI and Brent) and Propane (Mt Belvieu) increased compared to the prior week.
 - Natural gas (Henry Hub) remained similar to the prior week.
- Regional fuels inventories (see pages 2 and 3) compared to the previous week:
 - Ultra-low sulfur diesel (ULSD) inventories increased 14% while propane and natural gas (Henry Hub) also slightly increased compared to the prior week. Natural gas remains near 10-year high inventory volumes.
 - Total gasoline inventories slightly decreased compared to the prior week.
- Market Influencers Include:
 - Global factors include the ongoing Russian invasion of Ukraine including the associated geopolitical uncertainties, continued economics concerns, and supply outlook for the second half of the year.
- National Oceanic and Atmospheric Administration (NOAA) forecasts above average to leaning above temperatures with precipitation near normal to above average in New York/Northeast for the next 1-2 weeks (Page 6).
- NY retail prices (see pages 4 and 5) for heating and transportation fuels:
 - NY transportation gasoline prices were unchanged and diesel prices slightly declined compared to the prior week.
 - Heating oil and kerosene fuel prices increased while propane

Issue Contents:

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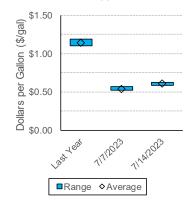
Note

- 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.

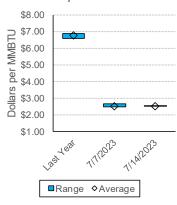
Fundamental Fuels Market Weekly Price Summaries



Propane Mt. Belvieu Spot Price



Natural Gas Henry Hub Spot Price





National Crude and East Region Natural Gas Inventories

2022

10-Year Max

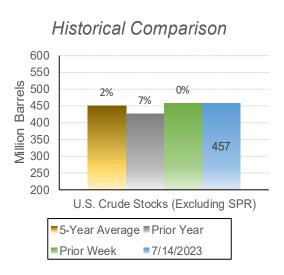
U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve) 600 550 **Million Barrels** 500 450 400 350 300 250 200 Jan Mar Jun Sep Dec

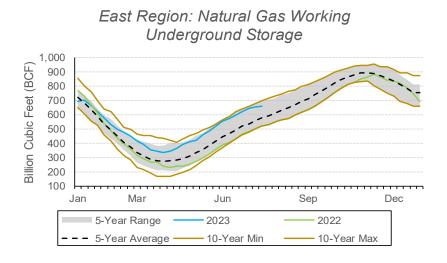
2023

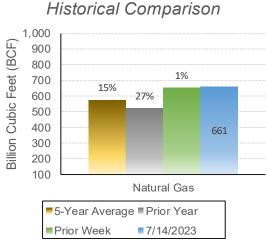
10-Year Min

5-Year Range

- 5-Year Average







Note:

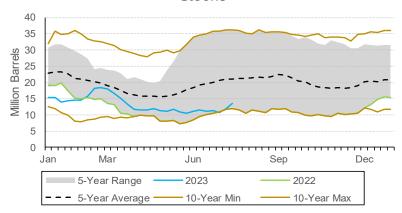
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.

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.

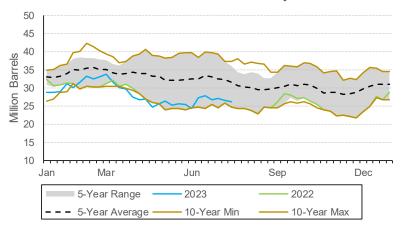


Regional Inventories: Select Liquid Fuels

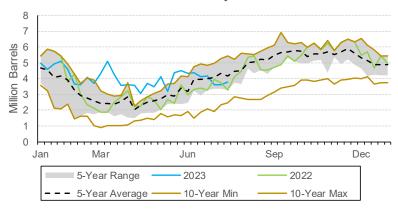
PADD 1B: Distillate (0 - 15 ppm S) Weekly Stocks



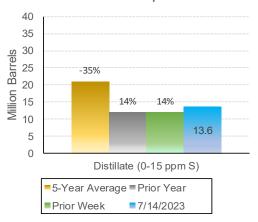
PADD 1B: Total Gasoline Weekly Stocks



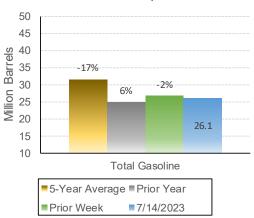
PADD 1B: Propane and Propylene Weekly Inventory



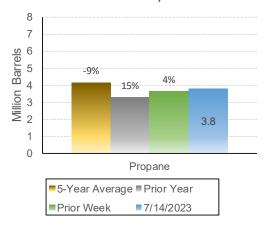
Historical Comparison



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				
Fuel Type	7/14/2023	7/7/2023	% Difference	Prior Year	% Difference
Regular Gasoline (dollars per gallon) ²	\$3.68	\$3.68	-0.2%	\$4.76	-22.8%
On-road Diesel (dollars per gallon) ²	\$4.38	\$4.39	-0.4%	\$6.01	-27.2%

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 NYSERDA.

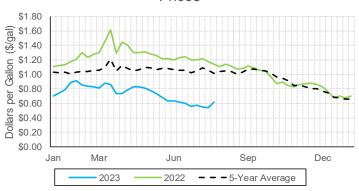


Heating Fuel Prices Summary

No. 2 Heating Oil Average Weekly Spot Prices New York Harbor



Propane Mt. Belvieu Average Weekly Spot Prices



Natural Gas Henry Hub Average Weekly Spot Prices



Weekly Survey Beaulte by Fuel Type	NYS Average Retail Prices				
Weekly Survey Results by Fuel Type	7/17/2023	6/26/2023	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars	#2.000	#0.70 F	4.00/	ФГ О 4О	20, 20/
per gallon) ²	\$3.866	\$3.795	1.9%	\$5.242	-26.3%
Propane Posted Credit Prices - 1,100 gallon usage	¢2 120	¢2 202	-2.3%	¢2 517	-11.0%
(dollars per gallon) ²	\$3.129	\$3.202	-2.3%	\$3.517	-11.0%
Kerosene Posted Credit Prices	ФГ 242	ФГ 202	0.00/	ФС 4CO	40.70/
(dollars per gallon) ²	\$5.313	\$5.283	0.6%	\$6.160	-13.7%
Monthly USEIA Reporting	April 2023	March 2023	% Difference	April 2022	% Difference
Monthly Average Residential Natural Gas Prices	¢4 520	\$1.557	-1.7%	\$1.437	6.5%
(dollars per Therm) ³	\$1.530	φ1.557	-1.7%	φ1.43 <i>1</i>	0.5%

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.

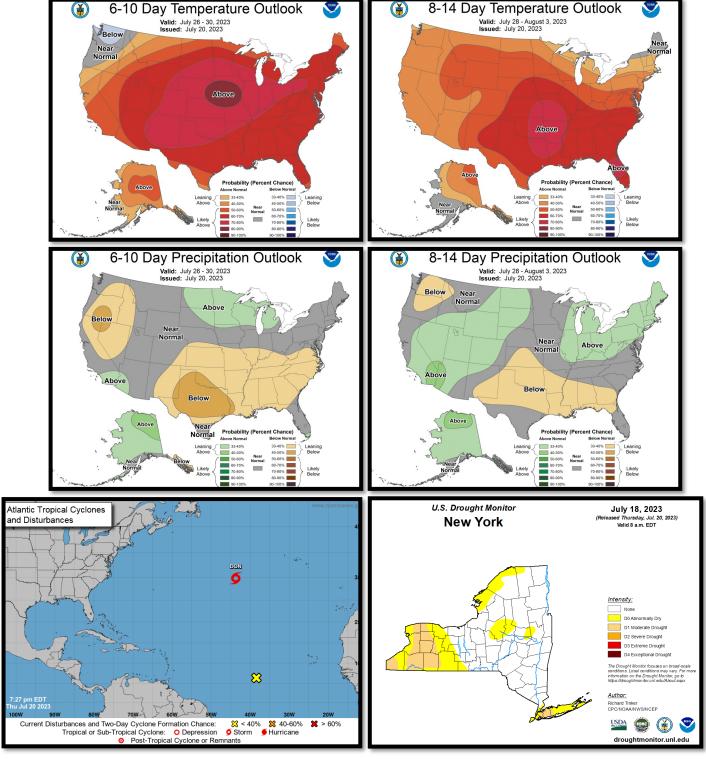
During the non-heating season (April through September), the retail price surveys are only conducted twice per month. Rows shaded blue in the table above indicate data that are from the most recent survey, but not reflective of the current week.

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



Weather Outlook and Seasonal Threat Monitoring

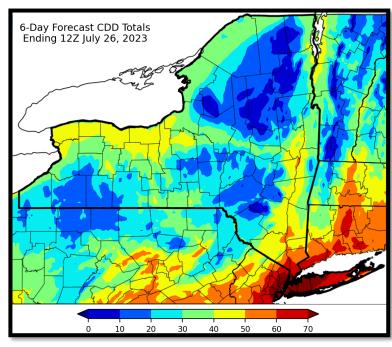


Notes:

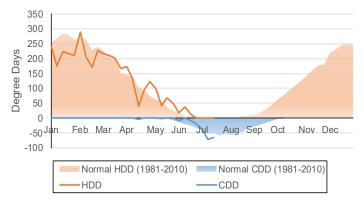
- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for spring/summer. Graphics from NYSDEC. See reference section for detailed citation.
- 3. Seasonal threat monitoring for drought conditions during the spring/summer.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

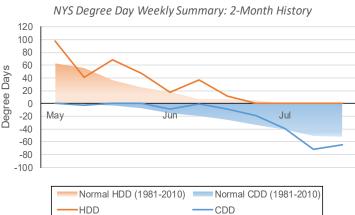


Degree Days Outlook and Summary



NYS	Dearee	Dav	Weekly	Summary:	Current	Year
1415	Degree	νuy	VVCCINIY	Julilliary.	Current	ICUI





6-Day CDD Forecast	Normal	% Difference
48	51	-6%
29	29	0%
41	43	-5%
36	32	13%
32	32	0%
81	88	-8%
45	47	-4%
41	44	-7%
35	30	17%
	Forecast 48 29 41 36 32 81 45 41	Forecast Normal 48 51 29 29 41 43 36 32 32 32 81 88 45 47 41 44

Forecast Dates:

07/20/2023 - 07/25/2023

Notes:

M = Missing data

Starting in June, the degree days reflect cooling degree days (CDD) with the arrival of late spring and summer seasons. Heating degree days (HDD) will return in September.

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

<u>Heating Degree Data</u>

Monthly Degree Day Data (Heating & Cooling)

Notes:

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



References

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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: https://www.eia.gov/dnav/pet/hist_xls/WD0ST_R1Y_1w.xls.

USEIA. 2023. Weekly Central Atlantic (PADD 1B) Ending Stocks of Total Gasoline (Thousand Barrels). Available online: https://www.eia.gov/dnav/pet/hist_xls/WGTST1B1w.xls.

USEIA. 2023. Weekly Central Atlantic (PADD 1B) Propane and Propylene Ending Stocks Excluding Propylene at Terminal (Thousand Barrels). Available online: https://www.eia.gov/dnav/pet/hist_xls/WPRST1B1w.xls.

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USEIA & NYSERDA. 2023. State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices Survey. Available online: https://www.eia.gov/petroleum/heatingoilpropane/.

Weather Outlook and Data

National Oceanic and Atmospheric Administration (NOAA). 2023. National Weather Service Climate Prediction Center. Temperature and Precipitation Outlooks. Available online: https://www.cpc.ncep.noaa.gov/.

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NOAA. 2023. National Hurricane Center and Central Pacific Hurricane Center. Atlantic Tropical Cyclones and Disturbances. Available online: https://www.nhc.noaa.gov/.

National Drought Mitigation Center. 2023. 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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