July 28, 2023



## **Overall Energy & Fuels Markets Summary**

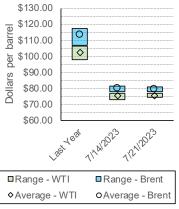
- Summary of average spot prices for the following fuels (see page 1).
  - Crude oil (WTI and Brent) and Natural gas (Henry Hub) remain similar/slight increase compared to the prior week.
  - Propane (Mt Belvieu) increased compared to the prior week.
- Regional fuels inventories (see pages 2 and 3) compared to the previous week:
  - Propane, total gasoline, and natural gas slightly increased compared to the prior week.
  - Ultra-low sulfur diesel (ULSD) inventories 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.
  - Extreme heat continuing in the southern U.S.
- National Oceanic and Atmospheric Administration (NOAA) forecasts below average temperatures with precipitation leaning 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 decreased compared to the prior week.

## Issue Contents:

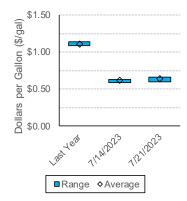
National crude and East Region natural gas inventories	Page 2
Regional Inventories: Select Liquid Fuels	Page 3
Transportation Fuels Prices Summary	Page 4
Heating Fuel Prices Summary	Page 5
Weather Outlook	Page 6
Degree Days Outlook and Summary	Page 7
References	Page 8

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

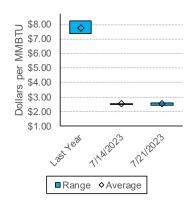




### Propane Mt. Belvieu Spot Price



### Natural Gas Henry Hub Spot Price



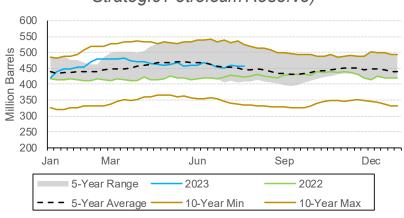
#### Note

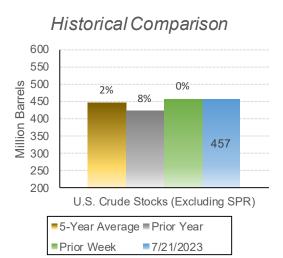
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays, noted by the date.



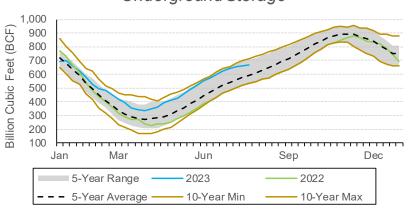
## **National Crude and East Region Natural Gas Inventories**

U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve)

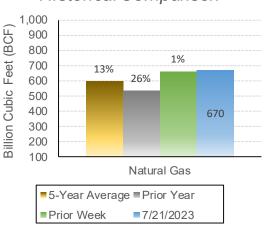








## Historical Comparison



#### Note:

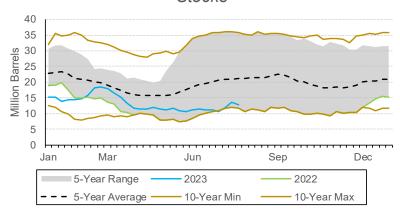
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.

<sup>3.</sup> 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.

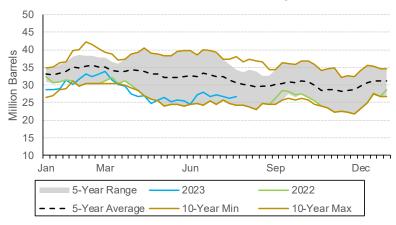


## **Regional Inventories: Select Liquid Fuels**

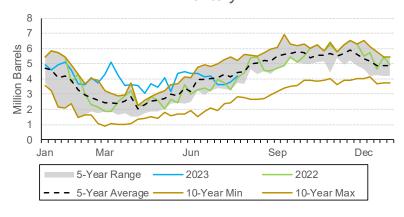
PADD 1B: Distillate (0 - 15 ppm S) Weekly Stocks



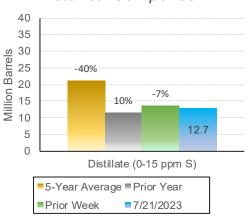
PADD 1B: Total Gasoline Weekly Stocks



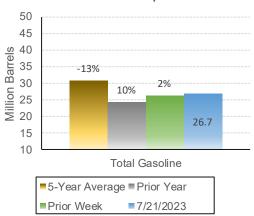
PADD 1B: Propane and Propylene Weekly Inventory



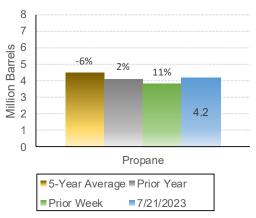
Historical Comparison



## Historical Comparison



### Historical Comparison



#### Notes:

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

<sup>2.</sup> 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				
i dei Type	7/21/2023	7/14/2023	% Difference	<b>Prior Year</b>	% Difference
Regular Gasoline (dollars per gallon) <sup>2</sup>	\$3.68	\$3.68	0.1%	\$4.65	-20.8%
On-road Diesel (dollars per gallon) <sup>2</sup>	\$4.36	\$4.38	-0.4%	\$5.88	-25.9%

#### Notes:

<sup>1.</sup> Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

<sup>2.</sup> 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 Results by Fuel Type	NYS Average Retail Prices - Next Survey: 07/31/2023				
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 per gallon) <sup>2</sup>	\$3.866	\$3.795	1.9%	\$5.242	-26.3%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) <sup>2</sup>	\$3.129	\$3.202	-2.3%	\$3.517	-11.0%
Kerosene Posted Credit Prices (dollars per gallon) <sup>2</sup>	\$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 (dollars per Therm) <sup>3</sup>	\$1.530	\$1.557	-1.7%	\$1.437	6.5%

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.

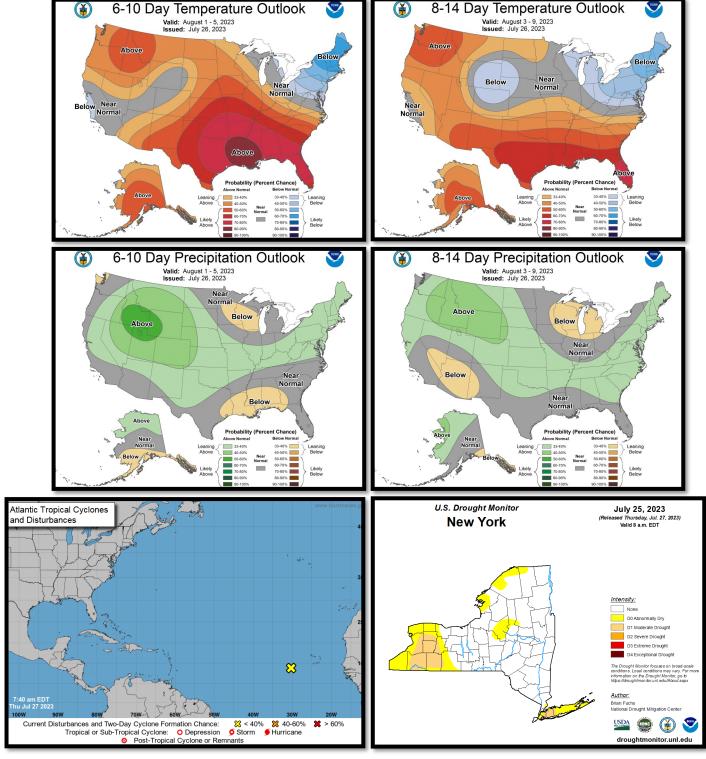
During the non-heating season (April through September), the retail price surveys are only conducted twice per month. Rows shaded blue in the table above indicate data that are from the most recent survey, but not reflective of the current week.

#### 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**

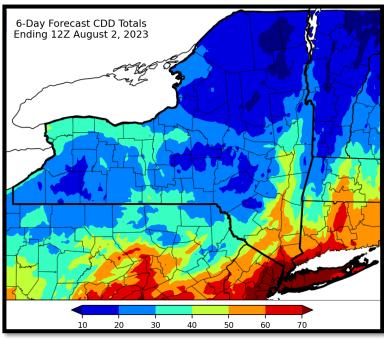


### Notes:

- 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**



City	o bay obb	Normal	/0	
City	Forecast	Nominal	Difference	
Albany	49	49	0%	
Binghamton	32	27	19%	
Buffalo	41	42	-2%	
Glens Falls	33	30	10%	
Massena	22	30	-27%	
NYC	94	86	9%	
Rochester	40	45	-11%	
Syracuse	40	43	-7%	
Watertown	32	29	10%	
Forecast Dat	tes:	•	•	

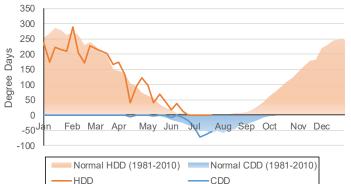
6-Day CDD

07/27/2023 - 08/01/2023

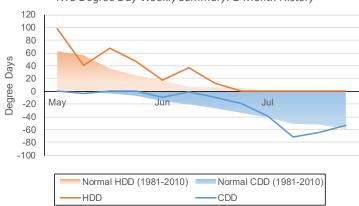
Notes:

1. M = Missing data

ing degree days (CDD) with the arrival of late NYS Degree Day Weekly Summary: Current Year spring and summer seasons. Heating degree days (HDD) will return in September.



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:

Starting in June, the degree days reflect cool-

Heating Degree Data

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

### **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: <a href="https://www.eia.gov/dnav/pet/hist\_xls/WD0ST\_R1Y\_1w.xls">https://www.eia.gov/dnav/pet/hist\_xls/WD0ST\_R1Y\_1w.xls</a>.

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.

### **National and Regional Price Summaries**

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

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: https://www.eia.gov/dnav/ng/xls/NG\_PRI\_FUT\_S1\_D.xls.

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

### **Weather Outlook and Data**

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

NOAA and Northeast Regional Climate Center (NRCC) at Cornell University. 2023. Weekly HDD Summary for New York. Available online: <a href="http://www.nrcc.cornell.edu/industry/hdd/">http://www.nrcc.cornell.edu/industry/hdd/</a>.

NOAA. 2023. National Weather Service Climate Prediction Center. Degree Days Statistics. Available online: <a href="https://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/cdus/degree\_days/">https://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/cdus/degree\_days/</a>.

NOAA. 2023. National Hurricane Center and Central Pacific Hurricane Center. Atlantic Tropical Cyclones and Disturbances. Available online: <a href="https://www.nhc.noaa.gov/">https://www.nhc.noaa.gov/</a>.

National Drought Mitigation Center. 2023. U.S. Drought Monitor. New York. Available online at: <a href="https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NY">https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NY</a>.

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, <u>Joseph.Osso@nyserda.ny.gov</u>, 518-862-1090 x3345