October 14, 2022



Overall Energy & Fuels Markets Summary

- Liquid fuels and natural gas average spot prices slightly increased/ remained comparable to the prior week and remain elevated compared to last year/historical during this similar time. (see pages 1, 4, and 5)
 - Fuel price volatility remains high.
- Global supply chains continue to be strained and influence the regional fuels inventories (see pages 2 and 3).
- Market influencers include:
 - Ongoing war in Eastern Europe and economic impacts on global economics and supply chain.
 - Global labor issues (refinery workers in France; rail labor in the U.S.).
 - Growing concerns regarding global economic slowdown/ recession influencing market decision-making.
- Consistent with elevated spot prices, NY consumers are paying elevated retail prices compared to last year for fuels due to the market conditions for fossil fuels.
- Northeast distillate and East Region natural gas inventories are below the 5-year and 10-year ranges, respectively (see pages 2 and 3), as regional and local markets adjust for heating season demand. Natural gas inventories continue to rise and propane inventories are at typical levels for this time of year. General market tightness for northeast fuels inventories is present.

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Fundamental Fuels Market Price Summaries

WTI Crude Spot Price Weekly Summary



Brent Crude Spot Price Weekly Summary



Natural Gas Henry Hub Spot Price Weekly Summary



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.



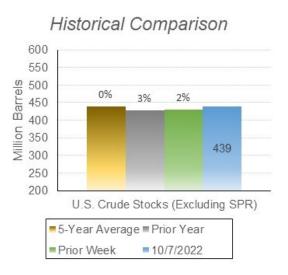
National Crude and East Region Natural Gas Inventories

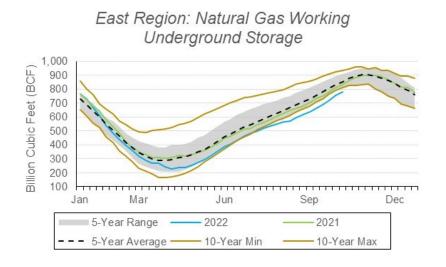
U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve) 600 550 500 450 400 350 300 250 200 Sep Mar Jun Dec Jan 5-Year Range 2022 2021

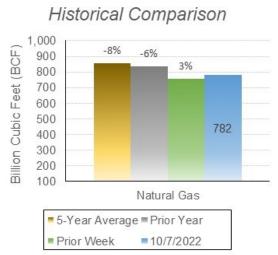
- 10-Year Min

- 10-Year Max

5-Year Average





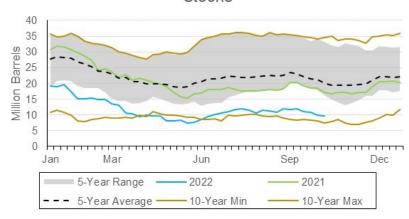


- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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



Regional Inventories: Select Liquid Fuels

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



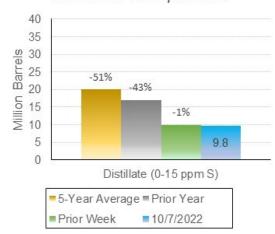
PADD 1B: Total Gasoline Weekly Stocks



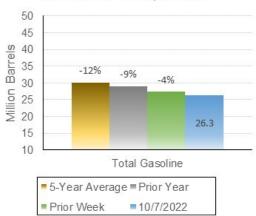
PADD 1B: Propane and Propylene Weekly Inventory



Historical Comparison



Historical Comparison



Historical Comparison



- 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.

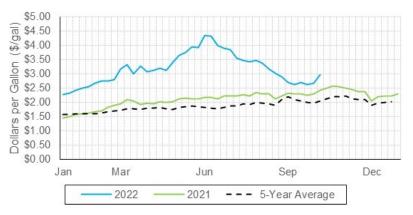


Transportation Fuel Prices Summary

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	10/7/2022	9/30/2022	% Difference	Prior Year	% Difference			
Regular Gasoline	\$3.60	\$3.66	-2%	\$3.30	9%			
(dollars per gallon) ²	,	40.00		7 010 0	-			
On-road Diesel	\$5.00	\$5.04	-1%	\$3.40	47%			
(dollars per gallon) ²	ψ5.00	ψ5.04	-170	ψυ.40	77 70			

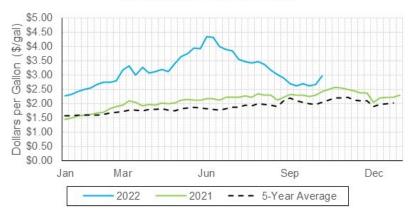
^{1.} Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

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



Heating Fuel Prices Summary

Conventional Gasoline Average Weekly Spot Prices New York Harbor



Propane Mt. Belvieu Average Weekly Spot Prices



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

<u>Home Heating Oil Prices</u> <u>Dashboard</u>

Kerosene Prices
Dashboard

<u>Propane Prices</u> <u>Dashboard</u>

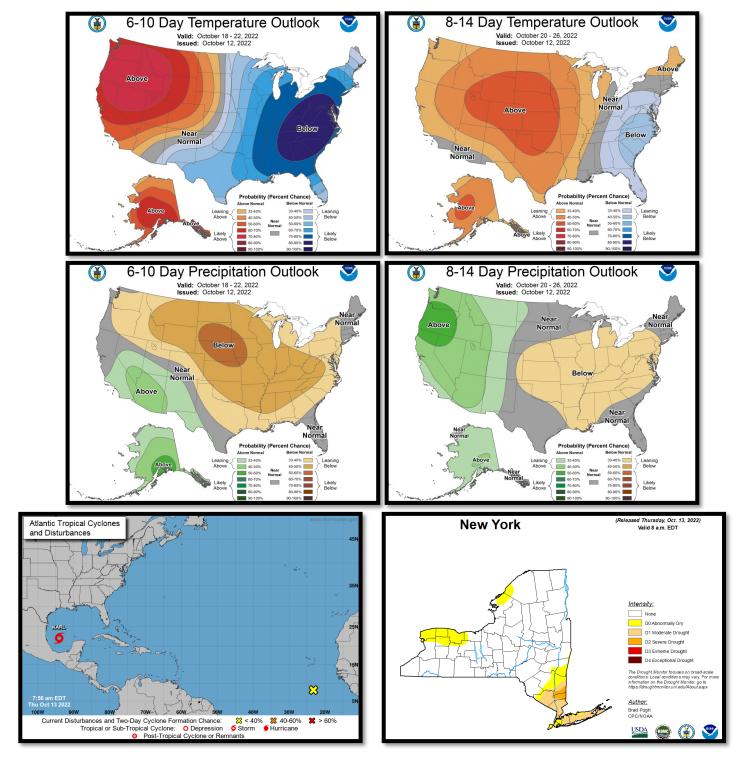
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices surveys.

Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
weekly Survey Results by Fuel Type	10/11/2022	10/3/2022	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) ²	\$5.422	\$4.817	12.5%	\$3.486	55.5%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) ²	\$3.499	\$3.525	-0.7%	\$3.219	8.7%
Kerosene Posted Credit Prices (dollars per gallon) ²	\$6.276	\$5.957	5.3%	\$3.827	64.0%
Monthly USEIA Reporting	July 2022	June 2022	% Difference	July 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) ³	\$2.536	\$2.380	6.6%	\$2.057	23.3%

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



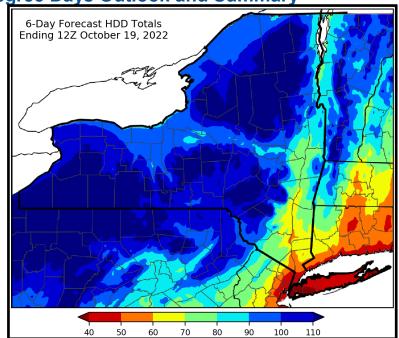
Weather Outlook and Seasonal Threat Monitoring



- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for hurricane season. Graphics from NOAA. 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



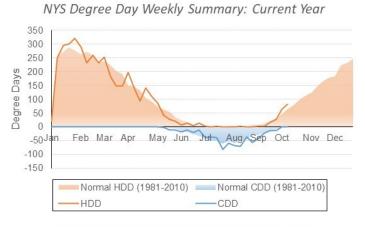
6-Day HDD Forecast
63
96
95
81
89
27
90
79
86

Forecast Dates:

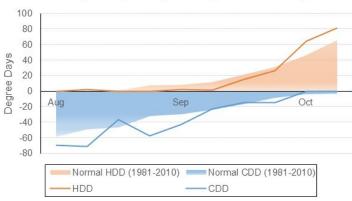
10/13/2022 - 10/18/2022

Notes:

1. M = Missing data







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

Heating Degree Data

Monthly Degree Day Data (Heating & Cooling)

- 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.



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

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

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National and Regional Price Summaries

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

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: https://www.eia.gov/dnav/ng/xls/NG_PRI_FUT_S1_D.xls.

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: https://www.eia.gov/petroleum/heatingoilpropane/.

Weather Outlook and Data

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

NOAA. National Hurricane Center and Central Pacific Hurricane Center. Available online: https://www.nhc.noaa.gov/.

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

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.

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