November 4, 2022



Overall Energy & Fuels Markets Summary

- Crude oil average spot prices slightly increased and natural gas (Henry Hub) average spot prices slightly decreased compared to the prior week (see pages 1, 4, and 5).
 - High uncertainties and volatilities around global events and economic concerns continue to influence the overall market prices
- Global supply chains and fuels inventories 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.
 - Growing concerns regarding global economic slowdown/ recession influencing market decision-making.
- NY consumers are paying elevated prices for fuels due to the market conditions for fossil fuels.
 - NY retail prices for heating oil and kerosene were comparable to the prior week and remain significantly greater than last year.
- Northeast fuels inventories remain low. Regional storage for distillate and total gasoline are below the 5-year range. Natural gas regional inventories increased and are now within the 5-year range. Propane/ propylene inventories are approaching the 5-year maximum. (pages 2 and 3)

Issue Contents:

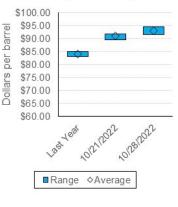
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WTI Crude Spot Price Weekly Summary



Brent Crude Spot Price Weekly Summary



Natural Gas Henry Hub Spot Price Weekly Summary



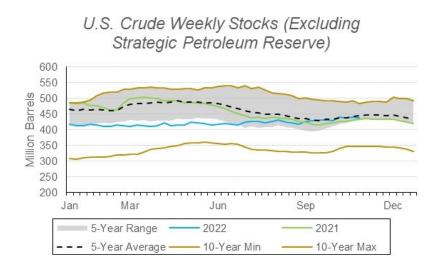
Note

^{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

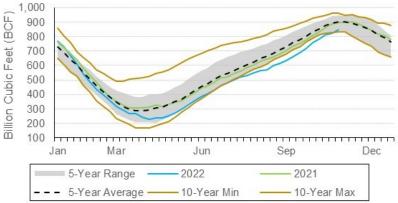


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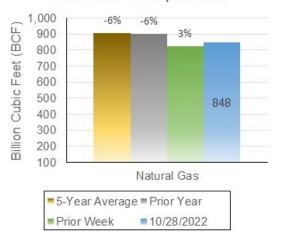
Historical Comparison



East Region: Natural Gas Working Underground Storage



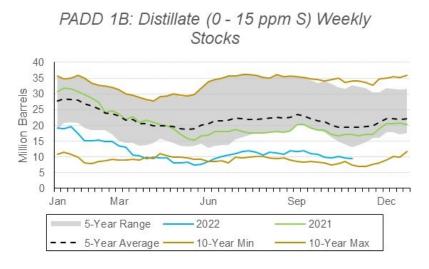
Historical Comparison



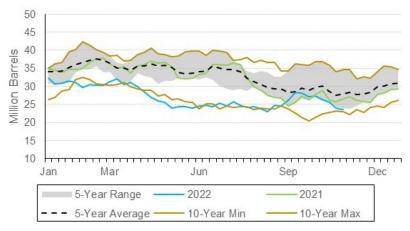
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

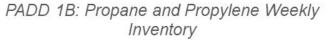


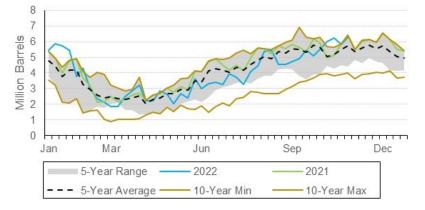
Regional Inventories: Select Liquid Fuels



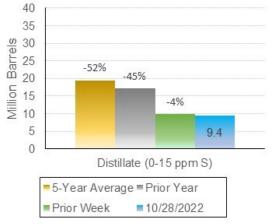
PADD 1B: Total Gasoline Weekly Stocks



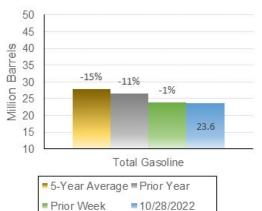




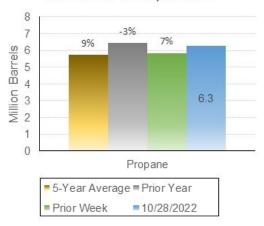
Historical Comparison



Historical Comparison



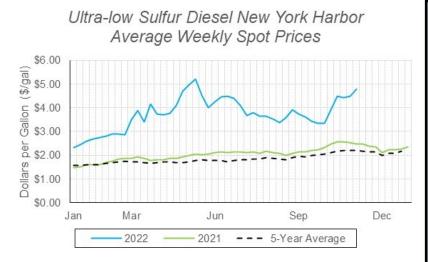
Historical Comparison



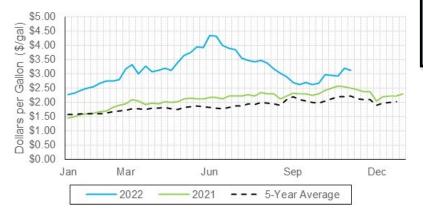
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater, negative values indicate current week is less than the historical value.

Transportation Fuel Prices Summarv





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

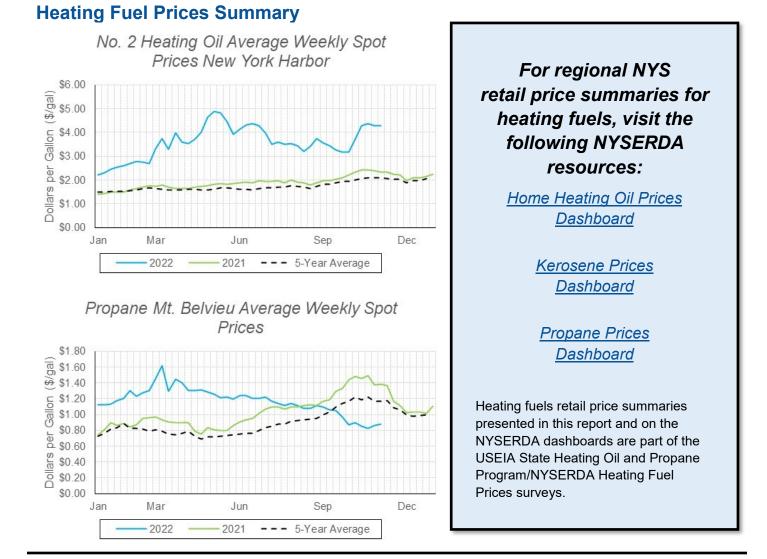
Transportation fuels retail price summaries presented in this report and on the NYSERDA dashboards are collected by the Energy Markets team from AAA and USEIA as part of our ongoing fuels markets analyses and monitoring.

Fuel Type	NYS Average Retail Prices				
гиеттуре	10/28/2022	10/21/2022	% Difference	Prior Year	% Difference
Regular Gasoline (dollars per gallon) ²	\$3.69	\$3.68	0%	\$3.54	4%
On-road Diesel (dollars per gallon) ²	\$5.76	\$5.62	3%	\$3.66	57%

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 NYSÉRDA.





Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
weekiy Survey Results by Fuel Type	10/31/2022	10/24/2022	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices	\$5.940	\$5.758	3.2%	\$3.592	65.3%
(dollars per gallon) ²	φ5.940	φ <u></u> σ.756	3.2%	\$3.09Z	05.5%
Propane Posted Credit Prices - 1,100 gallon usage	\$3.507	\$3.509	0.0%	\$3.285	6.8%
(dollars per gallon) ²	φ3.507				
Kerosene Posted Credit Prices	¢C 009	¢6.765	3.4%	¢2.050	77.2%
(dollars per gallon) ²	\$6.998	\$6.765	3.4%	\$3.950	11.2%
Monthly USEIA Reporting	July 2022	June 2022	% Difference	July 2021	% Difference
Monthly Average Residential Natural Gas Prices	\$2.536	\$2.380	6.6%	\$2.057	23.3%
(dollars per Therm) ³	φ2.000	φ2.30U	0.0%	φ2.007	23.370

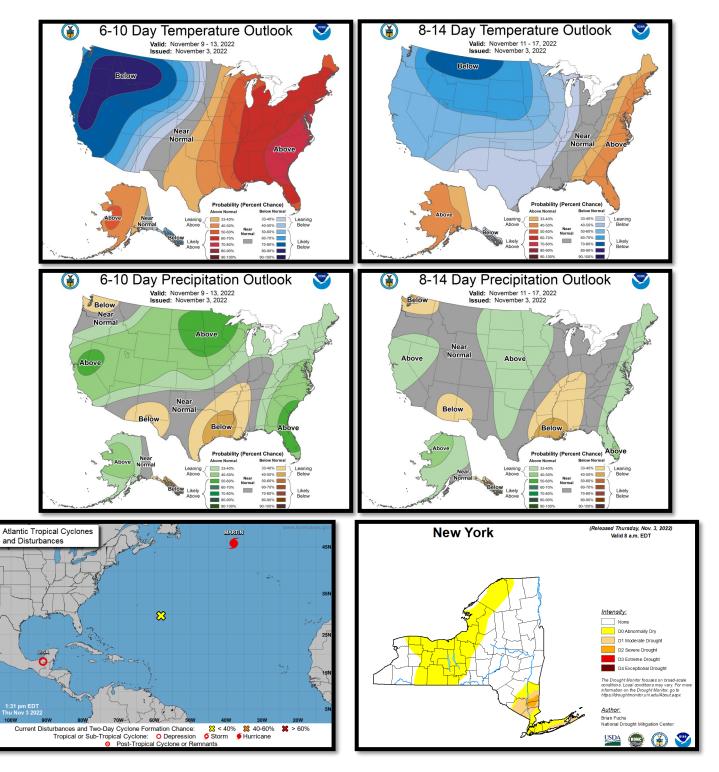
^{1.} Wholesale price data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.

^{2.} 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.



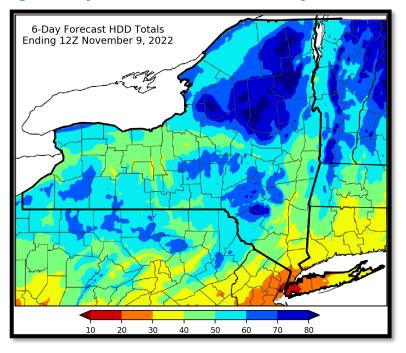
Weather Outlook and Seasonal Threat Monitoring



- 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

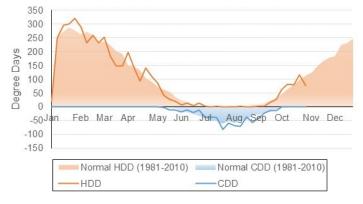


City	6-Day HDD Forecast	
Albany	44	
Binghamton	52	
Buffalo	54	
Glans Falls	58	
Massena	70	
NYC	19	
Rochester	51	
Syracuse	46	
Watertown	59	
Forecast Dates:		
11/03/2022 - 11/08/2022		

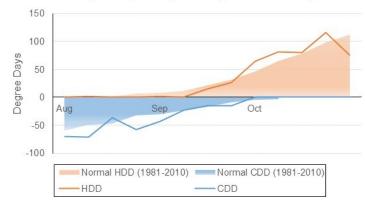
Notes:

1. M = Missing data

NYS Degree Day Weekly Summary: Current Year



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

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 1. detailed citations.
- HDD and Cooling Degree Day (CDD) data from NOAA. Positive values represent HDD and negative values represent CDD. See reference sec-2. tion 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: <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>.

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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. 2022. Natural Gas. *Natural Gas Residential Prices (Monthly).* Available online: <u>https://www.eia.gov/dnav/ng/xls/NG_PRI_SUM_A_EPG0_PRS_DMCF_M.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. 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: <u>http://www.nrcc.cornell.edu/industry/hdd/</u>.

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: <u>https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NY.</u>

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