November 25, 2022



Overall Energy & Fuels Markets Summary

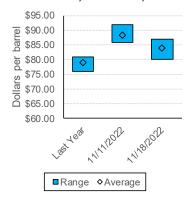
- Crude oil average spot prices decreased and the natural gas (Henry Hub) average spot price increased compared to the prior week (see page 1).
 - High uncertainties and volatilities around global events and economic concerns continue to influence market prices
- Natural gas east region inventories reached the 5-year average and propane regional inventories have exceeded the 5-year average. Ultra-low sulfur diesel (ULSD) and conventional gasoline 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
- NY consumers are paying elevated prices for fuels due to the market conditions for fossil fuels.
 - NY retail prices for heating oil slightly decreased while kerosene and propane retail prices slightly increased compared to the prior week and all remain greater than last year.
- SCHEDULE NOTE: due to the Thanksgiving Holiday some weather forecast graphics will have a slight difference in timing. We will return to our usual Friday distribution and graphics timings on December 2, 2022.

Issue Contents:

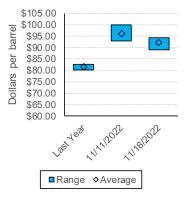
National crude and East Region natural gas inventories	Page 2
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Fundamental Fuels Market Price Summaries

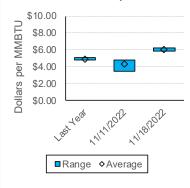
WTI Crude Spot Price Weekly Summary



Brent Crude Spot Price Weekly Summary



Natural Gas Henry Hub Spot Price Weekly Summary



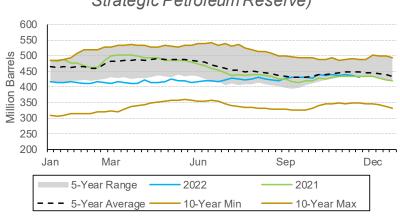
Note

- 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.

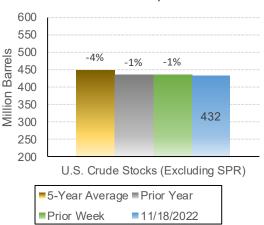


National Crude and East Region Natural Gas Inventories

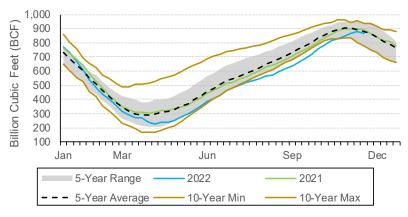
U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve)



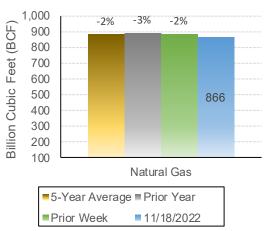
Historical Comparison



East Region: Natural Gas Working Underground Storage



Historical Comparison

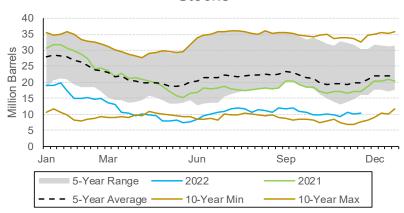


- Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

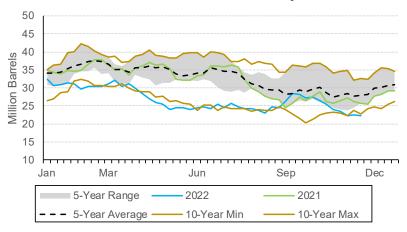


Regional Inventories: Select Liquid Fuels

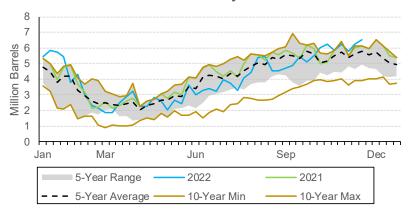
PADD 1B: Distillate (0 - 15 ppm S) Weekly Stocks



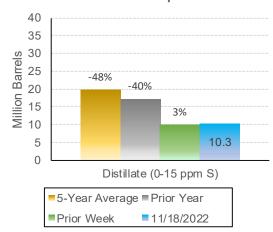
PADD 1B: Total Gasoline Weekly Stocks



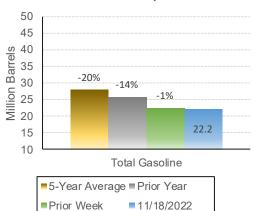
PADD 1B: Propane and Propylene Weekly Inventory



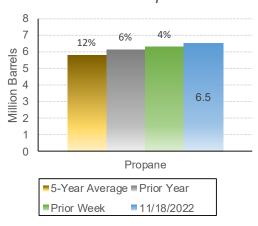
Historical Comparison



Historical Comparison



Historical Comparison



- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 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				
ruer Type	11/18/2022	11/11/2022	% Difference	Prior Year	% Difference
Regular Gasoline (dollars per gallon) ²	\$3.89	\$3.89	0%	\$3.56	9%
On-road Diesel (dollars per gallon) ²	\$5.99	\$5.93	1%	\$3.75	60%

^{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



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>

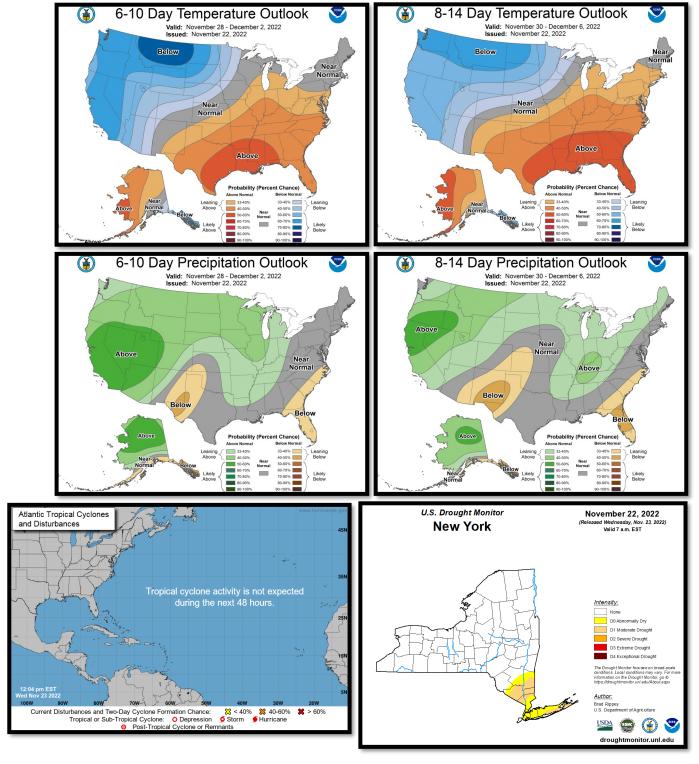
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices surveys.

Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
Weekly Sulvey Results by Fuel Type	11/21/2022	11/14/2022	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) ²	\$5.665	\$5.962	-5.0%	\$3.563	59.0%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) ²	\$3.539	\$3.528	0.3%	\$3.289	7.6%
Kerosene Posted Credit Prices (dollars per gallon) ²	\$7.474	\$7.233	3.3%	\$3.963	88.6%
Monthly USEIA Reporting	August 2022	July 2022	% Difference	August 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) ³	\$2.533	\$2.536	-0.1%	\$2.225	13.9%

- 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.



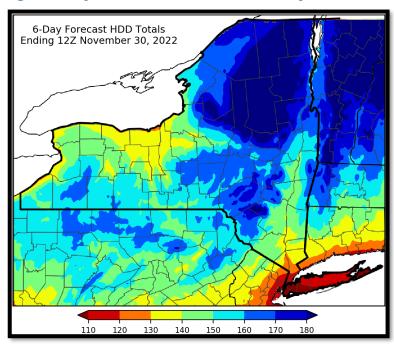
Weather Outlook and Seasonal Threat Monitoring



- 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



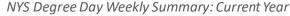
City	6-Day HDD Forecast
Albany	154
Binghamton	160
Buffalo	146
Glans Falls	170
Massena	184
NYC	112
Rochester	143
Syracuse	148
Watertown	163

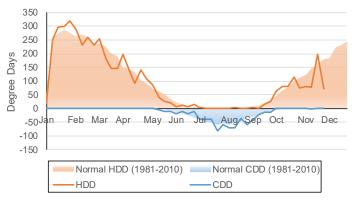
Forecast Dates:

11/24/2022 - 11/29/2022

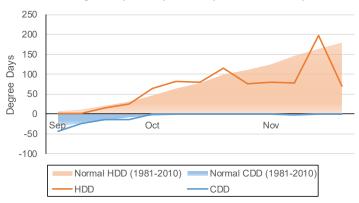
Notes:

1. M = Missing data





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 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.

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

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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

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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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