December 2, 2022



# **Overall Energy & Fuels Markets Summary**

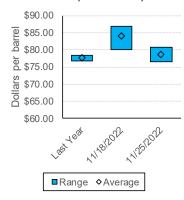
- Crude oil average spot prices decreased and the natural gas (Henry Hub) average spot price increased compared to the prior week (see page 1).
  - High uncertainties and volatilities around global events and economic concerns continue to influence market prices
- Natural gas east region inventories remain comparable to historical and propane regional remain greater than the 5-year average.
- Ultra-low sulfur diesel (ULSD) inventories slightly increased while conventional gasoline inventories slightly decreased. Both continue to be influenced by global markets and remain below the 5-year range (see pages 2 and 3).
- Market influencers include:
  - Ongoing war in Eastern Europe and impacts on global economics and supply chain.
  - Upcoming OPEC+ meetings regarding production planning.
- NY consumers are paying elevated prices for fuels due to the market conditions for fossil fuels.
  - NY retail prices for heating fuels slightly decreased over the past week, but remain elevated compared to last year.
  - NY transportation fuels retail prices slightly decreased over the past week, but also remain elevated compared to last year.

## Issue Contents:

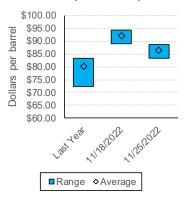
National crude and East Region natural gas inventories	Page 2
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# Fundamental Fuels Market Price Summaries

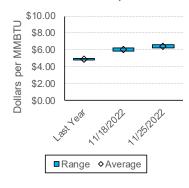
# WTI Crude Spot Price Weekly Summary



## Brent Crude Spot Price Weekly Summary



## Natural Gas Henry Hub Spot Price Weekly Summary



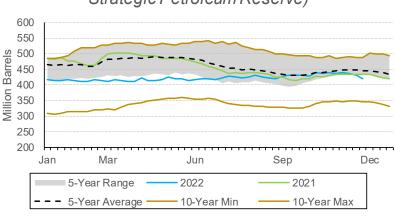
#### Note

- 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.

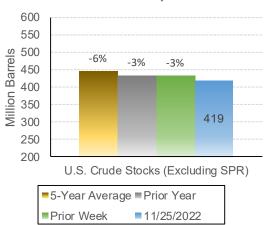


## **National Crude and East Region Natural Gas Inventories**

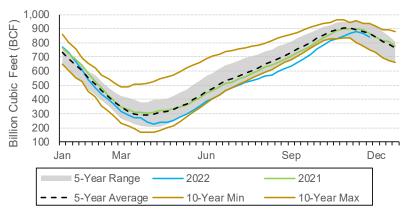
U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve)



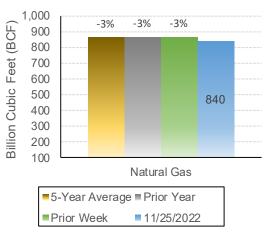
Historical Comparison



East Region: Natural Gas Working Underground Storage



# Historical Comparison

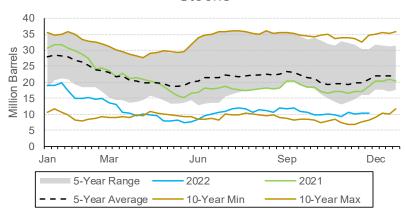


- Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

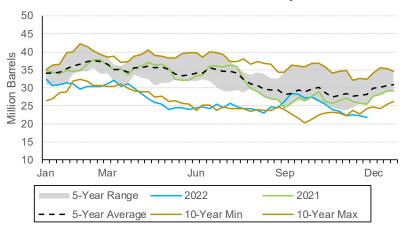


# **Regional Inventories: Select Liquid Fuels**

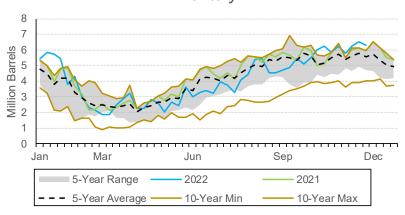
PADD 1B: Distillate (0 - 15 ppm S) Weekly Stocks



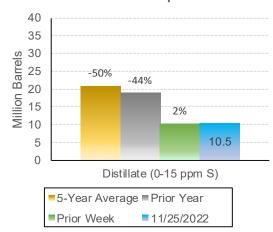
PADD 1B: Total Gasoline Weekly Stocks



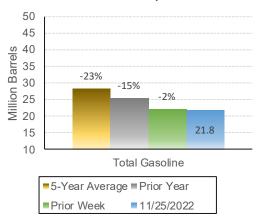
PADD 1B: Propane and Propylene Weekly Inventory



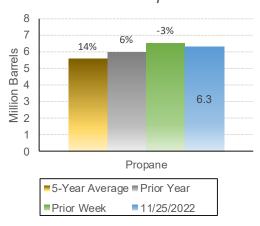
Historical Comparison



## 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				NYS Average Retail Prices		
ruer Type	11/25/2022	11/18/2022	% Difference	<b>Prior Year</b>	% Difference		
Regular Gasoline (dollars per gallon) <sup>2</sup>	\$3.83	\$3.89	-1%	\$3.57	8%		
On-road Diesel (dollars per gallon) <sup>2</sup>	\$5.93	\$5.99	-1%	\$3.76	58%		

<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



# 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>

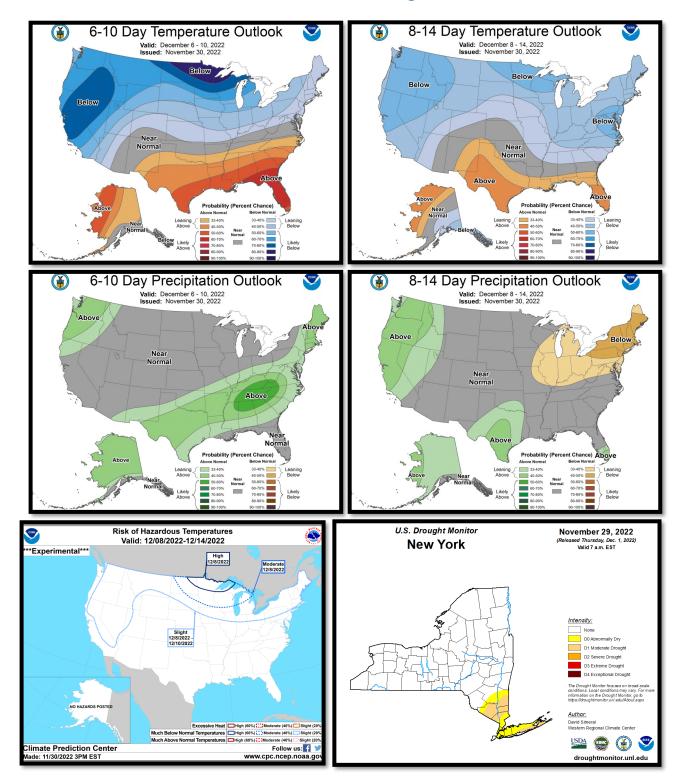
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices surveys.

Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
Weekly Sulvey Results by Fuel Type	11/28/2022	11/21/2022	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) <sup>2</sup>	\$5.404	\$5.665	-4.6%	\$3.555	52.0%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) <sup>2</sup>	\$3.514	\$3.539	-0.7%	\$3.288	6.9%
Kerosene Posted Credit Prices (dollars per gallon) <sup>2</sup>	\$7.323	\$7.474	-2.0%	\$3.968	84.5%
Monthly USEIA Reporting	August 2022	July 2022	% Difference	August 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) <sup>3</sup>	\$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.
- 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.



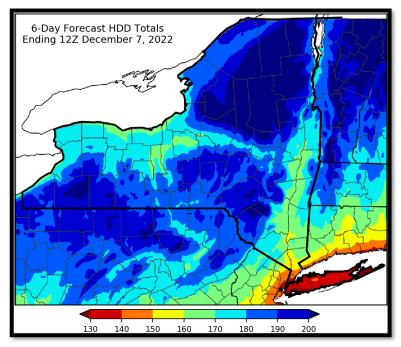
# **Weather Outlook and Seasonal Threat Monitoring**



- 1. Temperature and precipitation outlook graphics from NOAA. See references section for detailed citations.
- 2. Seasonal threat monitoring for winter season. Graphics from NOAA. 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	6-Day HDD Forecast
Albany	166
Binghamton	194
Buffalo	179
Glans Falls	178
Massena	193
NYC	135
Rochester	175
Syracuse	170
Watertown	175

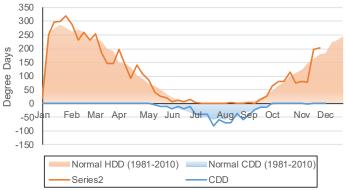
Forecast Dates:

12/01/2022 - 12/06/2022

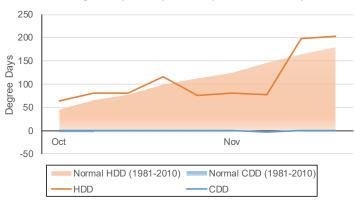
Notes:

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: <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. 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: <a href="https://www.eia.gov/dnav/pet/hist\_xls/WPRST1B1w.xls">https://www.eia.gov/dnav/pet/hist\_xls/WPRST1B1w.xls</a>.

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

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

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. 2022. Risk of Hazardous Temperatures [Experimental]. Available online: https://www.cpc.ncep.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: <a href="https://www.cpc.ncep.noaa.gov/products/analysis">https://www.cpc.ncep.noaa.gov/products/analysis</a> monitoring/cdus/degree days/.

National Drought Mitigation Center. 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>.

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, Joseph.Osso@nyserda.ny.gov, 518-862-1090 x3345