October 21, 2022

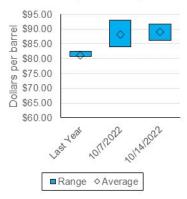


# **Overall Energy & Fuels Markets Summary**

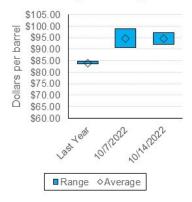
- Crude oil average spot prices had a slight increase compared to the prior week and continue to remain elevated compared to last year/historical during this similar time (see pages 1, 4, and 5).
  - High uncertainties and volatilities around global events and economic concerns are fueling the overall market prices
- 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.
  - 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.
- Northeast fuels inventories remain low. Regional storage for liquid fuels and natural gas are below the 5-year range (pages 2 and 3).
- U.S. Energy Information Administration issued <u>Winter Fuels Outlook</u> for Winter Season 2022-2023.

# 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



## 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

#### 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.



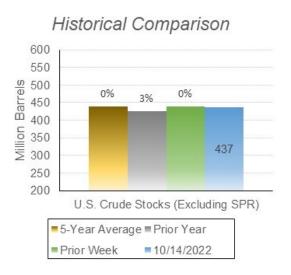
## **National Crude and East Region Natural Gas Inventories**

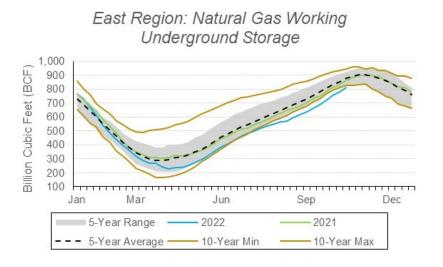
U.S. Crude Weekly Stocks (Excluding Strategic Petroleum Reserve) 600 550 500 450 400 350 300 250 200 Sep Mar Jun Dec Jan 5-Year Range 2022 2021

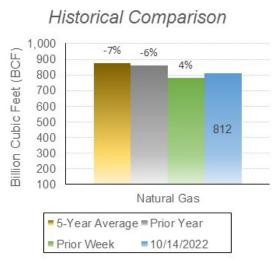
- 10-Year Min

- 10-Year Max

- - 5-Year Average





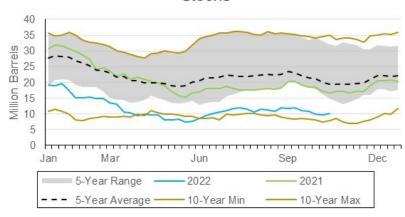


- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

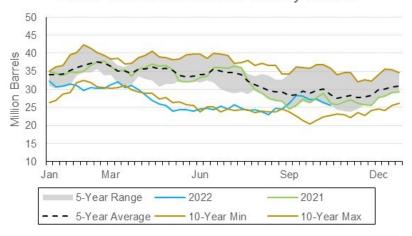


## **Regional Inventories: Select Liquid Fuels**

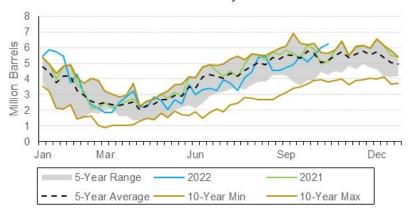
PADD 1B: Distillate (0 - 15 ppm S) Weekly Stocks



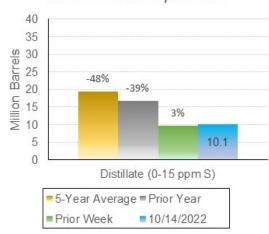
PADD 1B: Total Gasoline Weekly Stocks



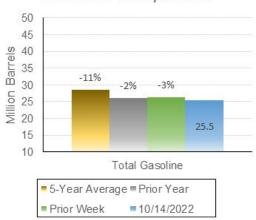
PADD 1B: Propane and Propylene Weekly Inventory



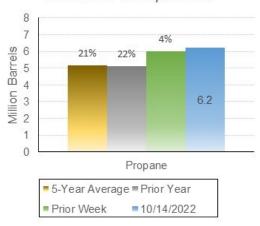
Historical Comparison



### Historical Comparison



### Historical Comparison

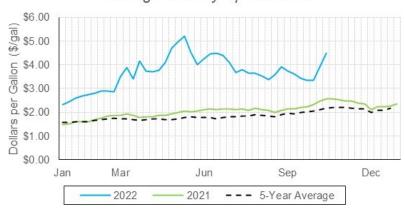


- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater, negative values indicate current week is less than the historical value.

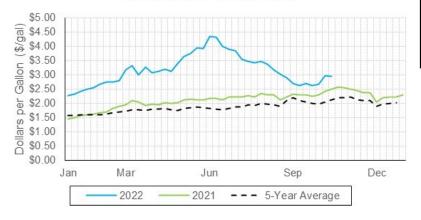


## **Transportation Fuel Prices Summary**

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			
ruer Type	10/14/2022	10/7/2022	% Difference	<b>Prior Year</b>	% Difference
Regular Gasoline (dollars per gallon) <sup>2</sup>	\$3.65	\$3.60	2%	\$3.37	8%
On-road Diesel (dollars per gallon) <sup>2</sup>	\$5.22	\$5.00	4%	\$3.46	51%

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

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:

Home Heating Oil Prices
Dashboard

Kerosene Prices
Dashboard

<u>Propane Prices</u> Dashboard

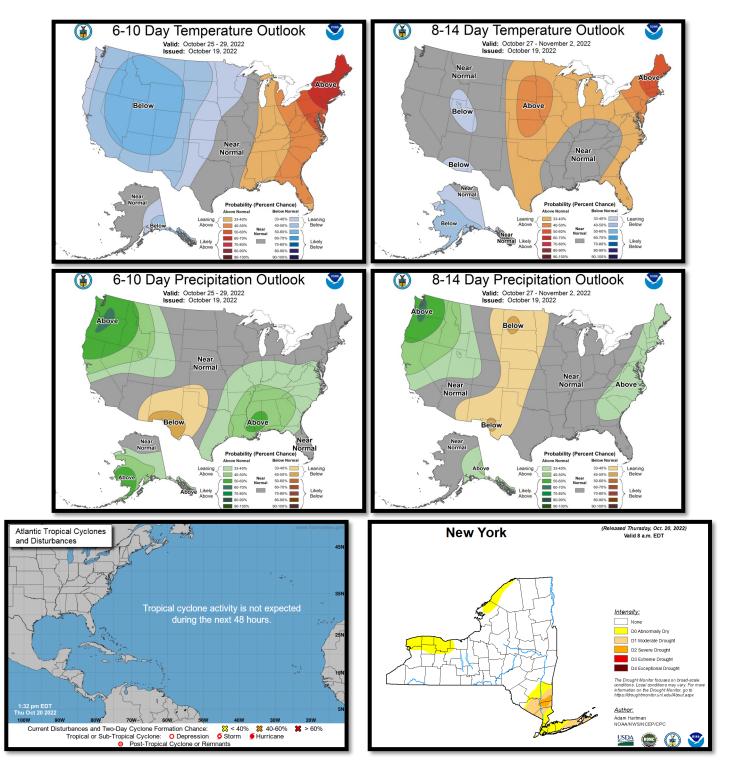
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/NYSERDA Heating Fuel Prices surveys.

Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
weekly Survey Results by Fuel Type	10/17/2022	10/11/2022	% Difference	<b>Prior Year</b>	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices	\$5.779	\$5.422	6.6%	\$3.563	62.2%
(dollars per gallon) <sup>2</sup>	φ5.779				
Propane Posted Credit Prices - 1,100 gallon usage	¢3 /07	3.497 \$3.499	-0.1%	\$3.256	7.4%
(dollars per gallon) <sup>2</sup>	φ5.49 <i>1</i>				
Kerosene Posted Credit Prices	\$6.777	\$6.276	8.0%	\$3.906	73.5%
(dollars per gallon) <sup>2</sup>	\$0.777 \$0.270	0.076	φ3.900	13.5%	
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) <sup>3</sup>	φ2.550	Ψ2.300	0.070	Ψ2.031	23.370

- 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.



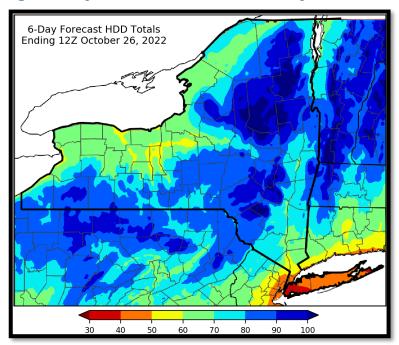
# **Weather Outlook and Seasonal Threat Monitoring**



- 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	77
Binghamton	87
Buffalo	67
Glans Falls	90
Massena	78
NYC	44
Rochester	67
Syracuse	65
Watertown	65

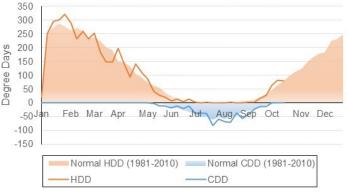
Forecast Dates:

10/20/2022 - 10/25/2022

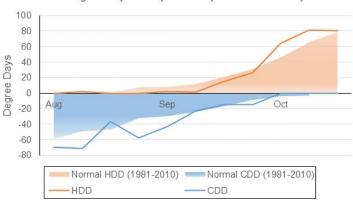
Notes:

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)

Weather Data

- 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: <a href="https://www.eia.gov/dnav/pet/hist\_xls/WGTST1B1w.xls">https://www.eia.gov/dnav/pet/hist\_xls/WGTST1B1w.xls</a>.

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.

 ${\tt USEIA~\&~NYSERDA.~2022.~State~Heating~Oil~and~Propane~Program/NYSERDA~Heating~Fuel~Prices~Survey.}$ 

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). 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: <a href="http://www.nrcc.cornell.edu/industry/hdd/">http://www.nrcc.cornell.edu/industry/hdd/</a>.

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.

Developed weekly by the NYSERDA Energy Markets team, part of the Energy & Environmental Analysis Group. For any questions, please reach out to:

Brad Leach, Program Manager, Brad.Leach@nyserda.ny.gov, 518-862-1090 x3364

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