

#### March 24, 2023

# **Overall Energy & Fuels Markets Summary**

- Crude oil (WTI and Brent) and propane (Mt. Belvieu) spot prices slightly decreased from the previous week, while natural gas (Henry Hub) weekly average spot prices were similar compared to the previous week (see page 1).
- Regional fuels inventories (see pages 2 and 3) varied compared to the previous week:
  - Ultra-low sulfur diesel (ULSD), propane, and total gasoline inventories decreased.
  - ULSD, propane, and natural gas inventories are within or greater than the 5-year range, while gasoline inventories are slightly below the 5-year range.

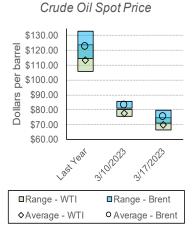
#### Market influencers include:

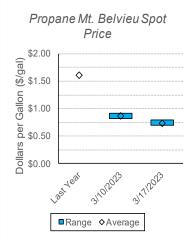
- Global factors include the ongoing Russian invasion of Ukraine, warmer winter in Europe, and global economics/supply chain/ banking sector concerns.
- Weather forecast for NY indicating potential for "leaning" to "likely" below normal temperatures for the end of March (see page 6). The warmer winter temperatures this winter season for the East Coast have decreased demand for heating fuels.
- NY retail prices (see pages 4 and 5) for gasoline, diesel, and kerosene are below prices last year:
  - NY heating oil and kerosene retail prices slightly decreased while propane retail prices increased compared to the prior week.
  - NY transportation gasoline and diesel fuel retail prices increased compared to the prior week.

## **Issue Contents:**

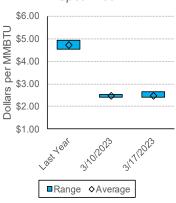
National crude and East Region natural gas inventories	. Page 2
Regional Inventories: Select Liquid Fuels	. Page 3
Transportation Fuels Prices Summary	Page 4
Heating Fuel Prices Summary	Page 5
Weather Outlook	. Page 6
Degree Days Outlook and Summary	Page 7
References	. Page 8

#### Fundamental Fuels Market <u>Weekly Price Summaries</u>





#### Natural Gas Henry Hub Spot Price



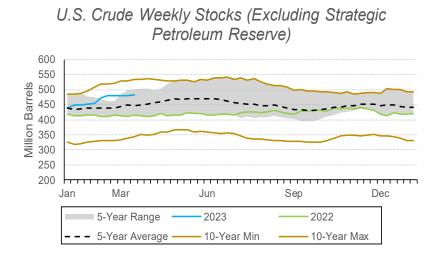
2. Graphics summarize available USEIA data from the most recent week ending on Fridays, noted by the date.

Note:

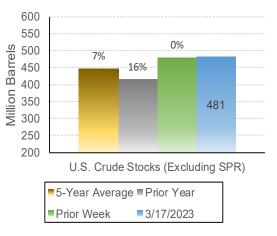
<sup>1.</sup> Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.



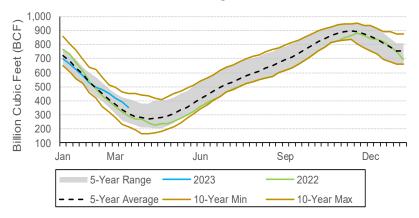
# National Crude and East Region Natural Gas Inventories



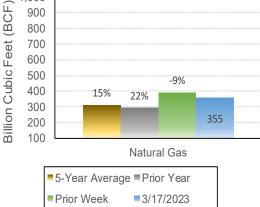
## Historical Comparison



## East Region: Natural Gas Working Underground Storage



# Historical Comparison

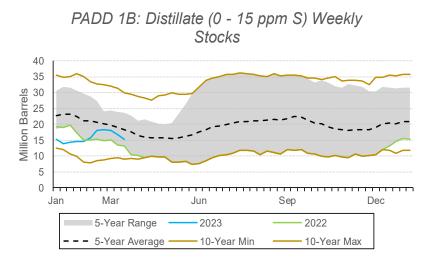


Note:

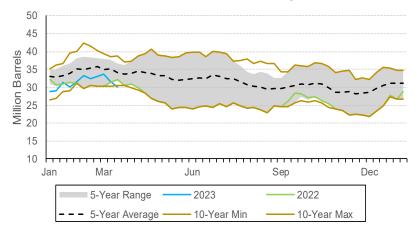
- 1. Data from USEIA, see references section for detailed citations. Visualizations by NYSERDA.
- 2. Graphics summarize available USEIA data from the most recent week ending on Fridays.
- 3. Historical comparison bar chart percentages reflect current week. Positive values indicate current week is greater,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

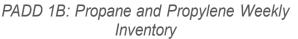


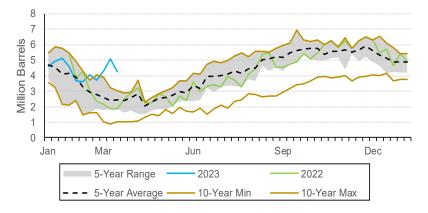
# **Regional Inventories: Select Liquid Fuels**



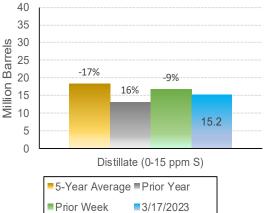
#### PADD 1B: Total Gasoline Weekly Stocks



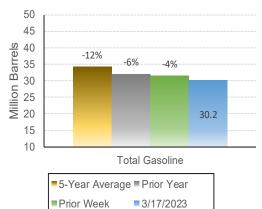




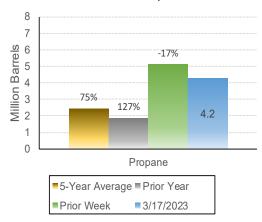




## Historical Comparison



## Historical Comparison

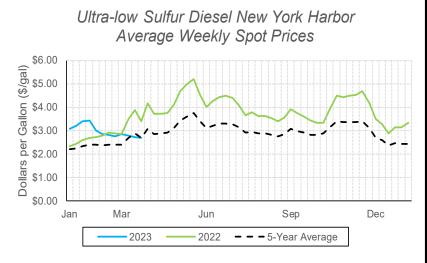


#### Notes:

- 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**



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.

Eucl Type	NYS Average Retail Prices				
Fuel Type	3/17/2023	3/10/2023	% Difference	<b>Prior Year</b>	% Difference
Regular Gasoline (dollars per gallon) <sup>2</sup>	\$4.37	\$3.87	12.7%	\$2.85	53.0%
On-road Diesel (dollars per gallon) <sup>2</sup>	\$5.06	\$4.32	17.1%	\$3.07	65.0%

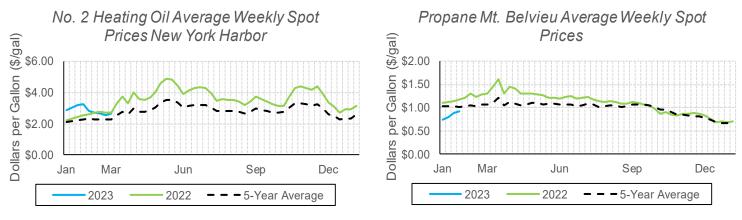
Notes:

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

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



# **Heating Fuel Prices Summary**



## Natural Gas Henry Hub Average Weekly Spot Prices



Weekly Survey Results by Fuel Type	NYS Average Retail Prices				
weekiy Survey Results by Fuer Type	3/20/2023	3/13/2023	% Difference	Prior Year	% Difference
Ultra-low #2 Heating Oil Posted Credit Prices (dollars per gallon) <sup>2</sup>	\$4.345	\$4.398	-1.2%	\$5.110	-15.0%
Propane Posted Credit Prices - 1,100 gallon usage (dollars per gallon) <sup>2</sup>	\$3.482	\$3.465	0.5%	\$3.746	-7.0%
Kerosene Posted Credit Prices (dollars per gallon) <sup>2</sup>	\$5.871	\$5.973	-1.7%	\$5.518	6.4%
Monthly USEIA Reporting	December 2022	November 2022	% Difference	December 2021	% Difference
Monthly Average Residential Natural Gas Prices (dollars per Therm) <sup>3</sup>	\$1.621	\$1.866	-13.1%	\$1.410	15.0%
Ear regional NVS rotail price summaries for	Notes:				

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

Home Heating Oil Prices Dashboard

Kerosene Prices Dashboard

Propane Prices Dashboard

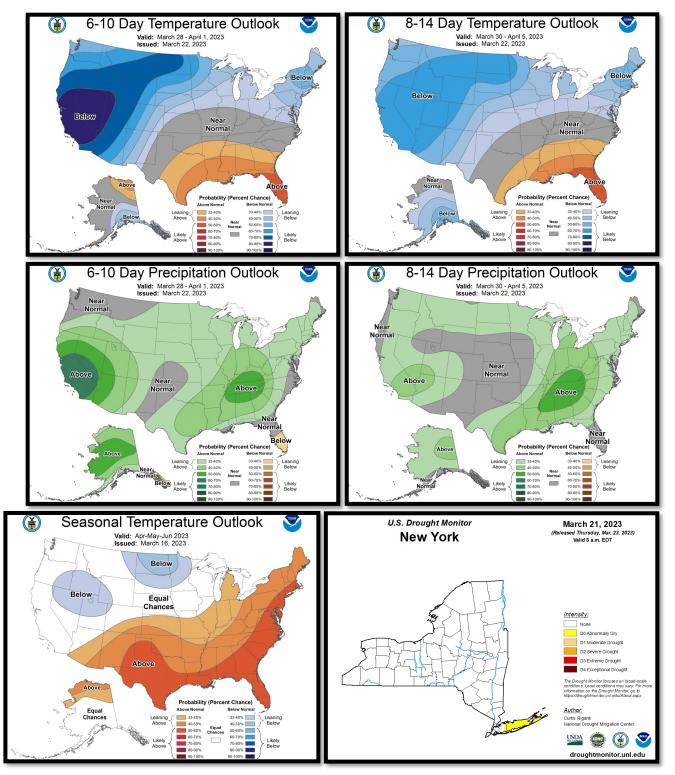
Heating fuels retail price summaries presented in this report and on the NYSERDA dashboards are part of the USEIA State Heating Oil and Propane Program/ NYSERDA Heating Fuel Prices surveys.

#### Notes:

- 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. Highlighted cells indicate price correction from prior week.
- Residential natural gas price data from USEIA, see references section for detailed citations. Visualization by NYSERDA.



## Weather Outlook and Seasonal Threat Monitoring

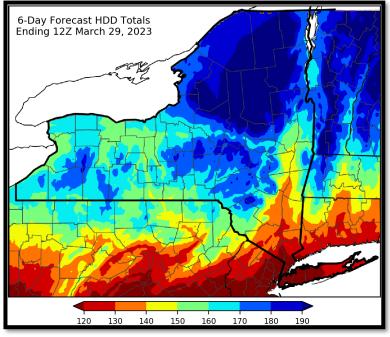


#### Notes:

- 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.
- Seasonal threat monitoring for drought conditions during the spring/summer. Graphic from National Drought Mitigation Center. See references section for detailed citation.



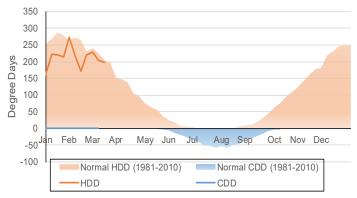
## **Degree Days Outlook and Summary**

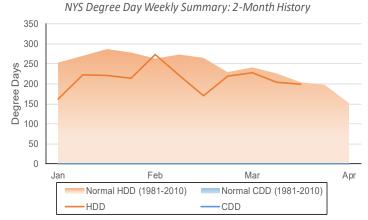


City	6-Day HDD Forecast	Normal	% Difference
Albany	141	156	-10%
Binghamton	158	177	-11%
Buffalo	154	167	-8%
Glens Falls	160	178	-10%
Massena	184	195	-6%
NYC	93	115	-19%
Rochester	154	161	-4%
Syracuse	158	167	-5%
Watertown	169	186	-9%
Forecast Date	es.		

03/23/2023 - 03/28/2023

Notes: 1. M = Missing data





additional information, visit the following NYSERDA resources: <u>Heating Degree Data</u>

> <u>Monthly Degree Day Data</u> (Heating & Cooling)

For regional NYS

Heating and Cooling

Degree Data along with

#### Notes:

- 1. Heating degree day (HDD) forecast from NOAA & Northeast Regional Climate Center at Cornell University (NRCC). See references section for detailed citations.
- 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.

NYS Degree Day Weekly Summary: Current Year



## 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>.

USEIA. 2022. Weekly Central Atlantic (PADD 1B) Propane and Propylene Ending Stocks Excluding Propylene at Terminal (Thousand Barrels). Available online: <u>https://www.eia.gov/dnav/pet/hist\_xls/WPRST1B1w.xls</u>.

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

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

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 & 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 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: <a href="https://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/cdus/degree\_days/">https://www.cpc.ncep.noaa.gov/products/analysis\_monitoring/cdus/degree\_days/</a>.

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>.

Note that there may be slight differences between USEIA reported values and this NYSERDA summary due to methodology differences.

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

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