

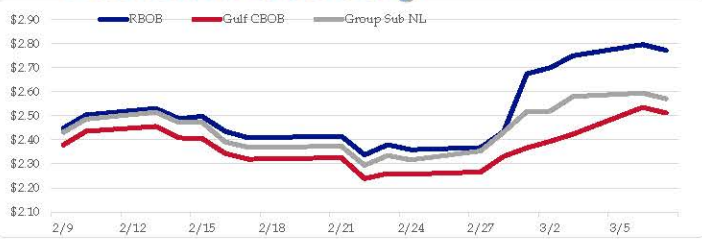
Gasoline

	RBOB	Change	Gulf CBOB	Change	Group Sub NL	Change	Gulf Basis	Group Basis	LA Basis
3/7	\$2.7725	-\$0.0240	\$2.5117	-\$0.0237	\$2.5710	-\$0.0235	\$(0.2614)	\$(0.2018)	\$0.2845
3/6	\$2.7965	\$0.0461	\$2.5354	\$0.1110	\$2.5945	\$0.0139	\$(0.2612)	\$(0.2020)	\$0.2860
3/3	\$2.7504	\$0.0501	\$2.4244	\$0.0307	\$2.5806	\$0.0607	\$(0.3261)	\$(0.1698)	\$0.3810
3/2	\$2.7003	\$0.0255	\$2.3936	\$0.0270	\$2.5199	\$0.0023	\$(0.3067)	\$(0.1804)	\$0.4110
3/1	\$2.6748	\$0.2405	\$2.3666	\$0.0351	\$2.5176	\$0.0851	\$(0.3082)	\$(0.1572)	\$0.4595
2/28	\$2.4343	\$0.0660	\$2.3315	\$0.0655	\$2.4325	\$0.0790	\$(0.1028)	\$(0.0018)	\$0.6574
2/27	\$2.3683	\$0.0096	\$2.2660	\$0.0086	\$2.3535	\$0.0371	\$(0.1023)	\$(0.0148)	\$0.6003
2/24	\$2.3587	-\$0.0208	\$2.2575	-\$0.0021	\$2.3164	-\$0.0183	\$(0.1013)	\$(0.0423)	\$0.5595

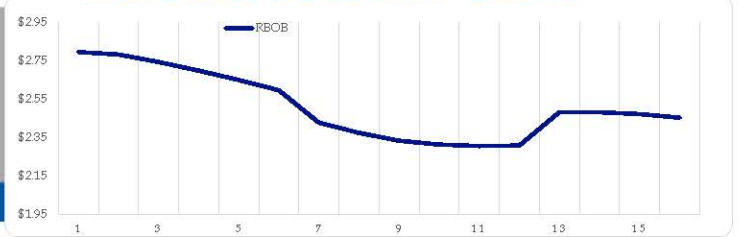
RBOB Technicals

Indicator	Direction	Resistance
MACD	Neutral	3.0221 Oct High
Stochastics	Overbought	2.7135 2023 High
RSI	Neutral	2.0204 Dec 2022 Low
ADX	Bullish Trend	1.8800 Dec 21 Low
Momentum	Neutral	Support
Bias:	Neutral	

Gasoline History



Gasoline Forward Curve



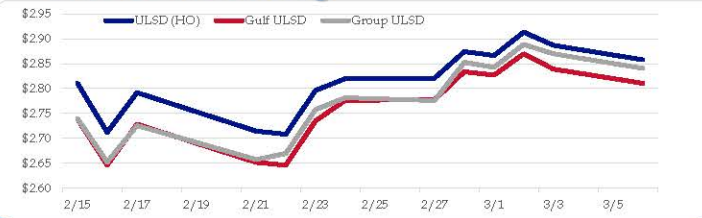
Diesel

	ULSD (HO)	Change	Gulf ULSD	Change	Group ULSD	Change	Gulf Basis	Group Basis	LA Basis
3/7	\$2.8575	-\$0.0291	\$2.8106	-\$0.0284	\$2.8406	-\$0.0289	\$(0.0482)	\$(0.0171)	\$(0.0245)
3/6	\$2.8866	-\$0.0265	\$2.8389	-\$0.0307	\$2.8695	-\$0.0190	\$(0.0477)	\$(0.0171)	\$(0.0255)
3/3	\$2.9131	\$0.0469	\$2.8697	\$0.0429	\$2.8885	\$0.0458	\$(0.0435)	\$(0.0246)	\$0.0095
3/2	\$2.8662	-\$0.0076	\$2.8267	-\$0.0067	\$2.8427	-\$0.0099	\$(0.0395)	\$(0.0235)	\$0.0095
3/1	\$2.8738	\$0.0529	\$2.8335	\$0.0564	\$2.8527	\$0.0769	\$(0.0404)	\$(0.0212)	\$0.0195
2/28	\$2.8209	\$0.0011	\$2.7771	\$0.0007	\$2.7758	-\$0.0057	\$(0.0438)	\$(0.0451)	\$0.0242
2/27	\$2.8198	\$0.0236	\$2.7764	\$0.0415	\$2.7815	\$0.0236	\$(0.0434)	\$(0.0383)	\$0.0300
2/24	\$2.7962	\$0.0881	\$2.7349	\$0.0888	\$2.7579	\$0.0882			

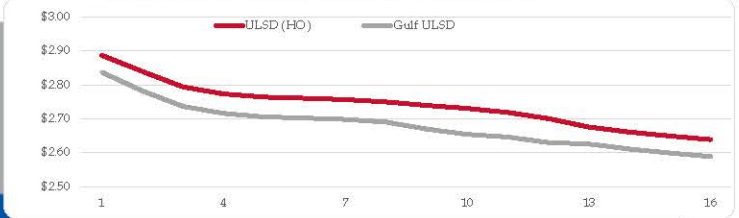
HO Technicals

Indicator	Direction	Resistance
MACD	Bearish	4.6841 Oct High
Stochastics	Oversold	3.5800 2023 High
RSI	Oversold	2.6577 2023 Low
ADX	Bearish	2.3134 2022 Low
Momentum	Bearish	Support
Bias:	Neutral	

Diesel History



Diesel Forward Curve



Crude

	WTI	Change	Brent	Change
3/7	\$79.75	-\$0.71	\$85.58	-\$0.60
3/6	\$80.46	\$0.78	\$86.18	\$0.35
3/3	\$79.68	\$1.52	\$85.83	\$1.08
3/2	\$78.16	\$0.47	\$84.75	\$0.44
3/1	\$77.69	\$0.64	\$84.31	\$0.42
CPL space	Line 1	Change	Line 2	Change
	0.0068	-\$0.0158	-\$0.0130	\$0.0012

Refinery Margins

		Vs WTI				Vs Brent				Group / WCS
		Gulf Gas	Gulf Diesel	3/2/1	5/3/2	Gulf Gas	Gulf Diesel	3/2/1	5/3/2	3/2/1
3/7		\$26.02	\$38.77	\$30.27	\$31.12	\$20.30	\$33.05	\$24.55	\$25.40	33.14
3/6		\$22.14	\$40.85	\$28.38	\$29.62	\$15.99	\$34.70	\$22.23	\$23.47	33.02
3/3		\$22.37	\$40.56	\$28.43	\$29.65	\$15.78	\$33.97	\$21.84	\$23.06	32.20
3/2		\$21.71	\$41.31	\$28.24	\$29.55	\$15.09	\$34.69	\$21.62	\$22.93	32.74

RINs and Price Drivers

Current Year Biodiesel RINs			Current Year Ethanol RINs		
	Settle	Net Change		Settle	Net Change
	1.6075	0.000		1.5750	0.013
Price Drivers			Price Drivers		
	Settle	Net Change		Settle	Net Change
Soybeans	1541.00	-4.250	Ethanol	2.16	0.000
Soybean Oil	59.88	-0.330	Com	644.50	-1.250
BOHO Spread	1.604		Com Crush	-0.141	
Soy Crush	654.44		RVO Estimate		
			Per Gallon	\$ 0.1780	\$ 0.0010
			Per Barrel	\$ 7.48	\$ 0.04

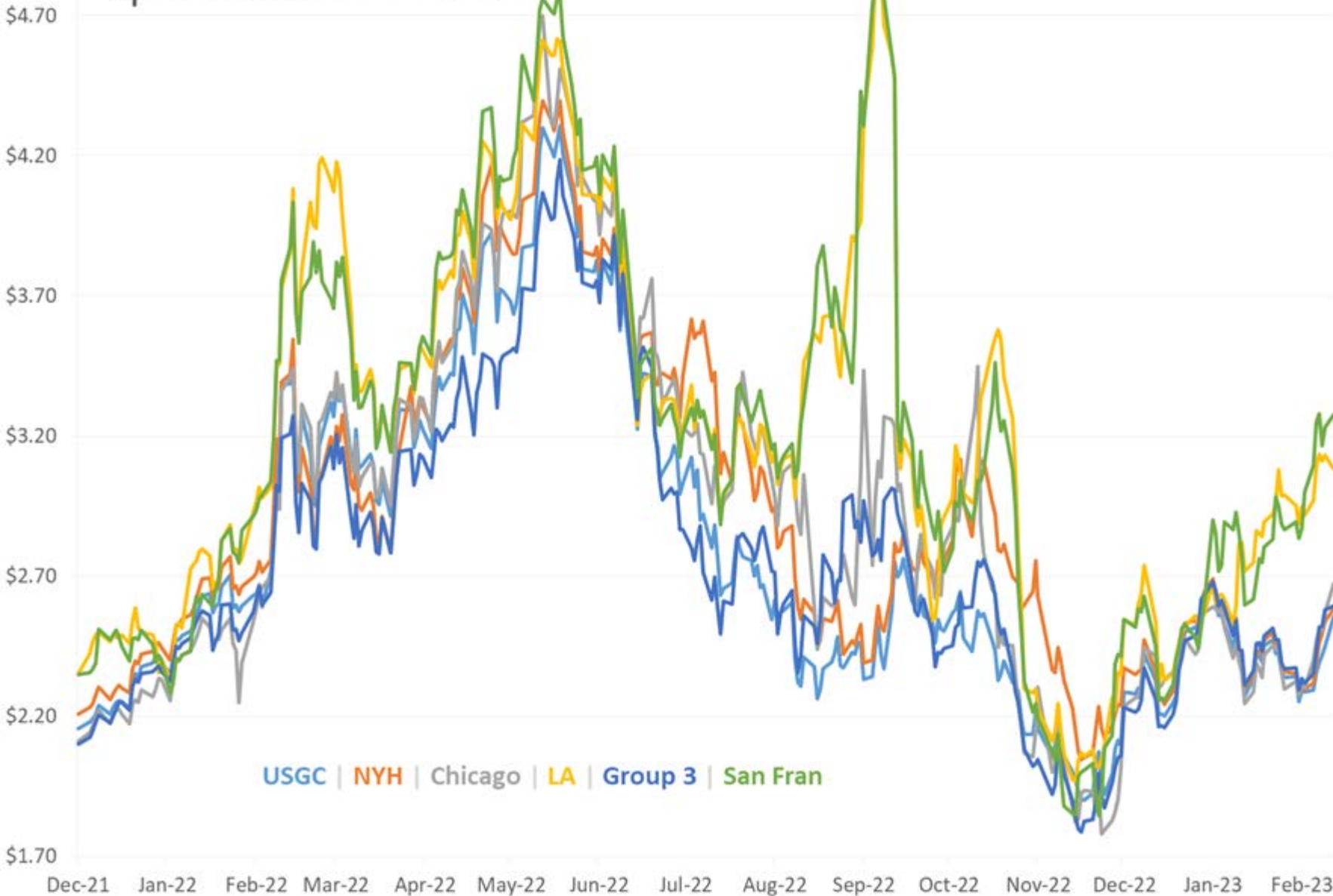
Economic Indicators

Commodity Futures

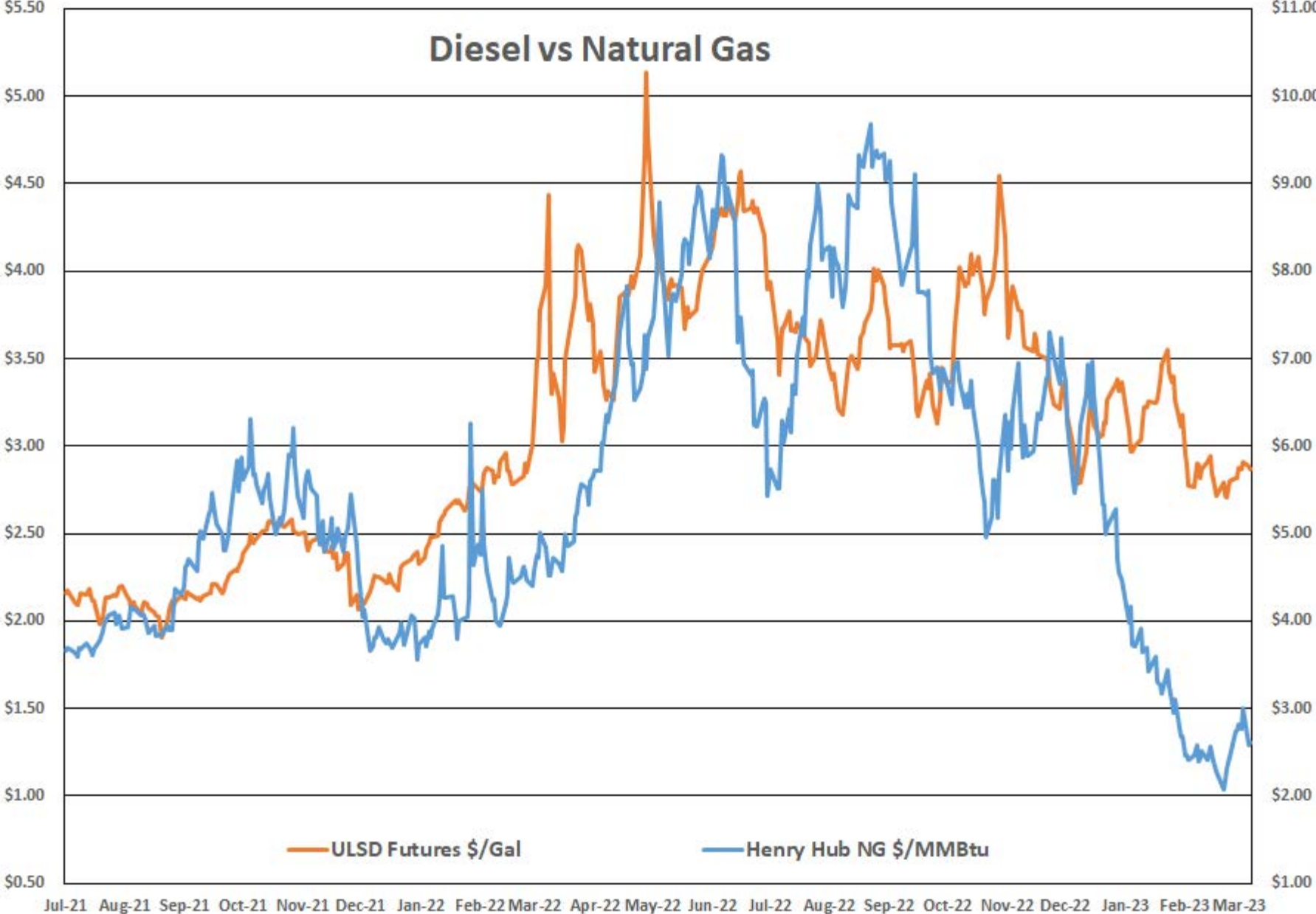
	Settle	Change		Settle	Change
S&P 500 Futures	4,059	6.00	NatGas	2.572	
DJIA	33,431	40.47	Gold	1,848	-13.0
EUR/USD	1.0680	-0.0012	Silver	20.98	-0.4
USD Index	104.33	0.15	Copper	4.10	-0.065
US 10 YR YIELD	3.98%	0.01	FCOJ	261.70	
US 2 YR YIELD	4.89%	0.03	Wheat	682.50	
Oil Volatility Index	35.20	-2.17	Butane	1.096	
S&P Volatility Index (VIX)	18.49	0.12	Propane	0.908	
Nikkei 225 Index	28,205	245.00	Bitcoin	22,390	25

*SOURCES: Nymex, CBOT, NYSE, ICE, NASDAQ, CME Group, CBOE. Prices delayed.

Spot Gasoline Prices



Diesel vs Natural Gas



— ULSD Futures \$/Gal

— Henry Hub NG \$/MMBtu

Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23

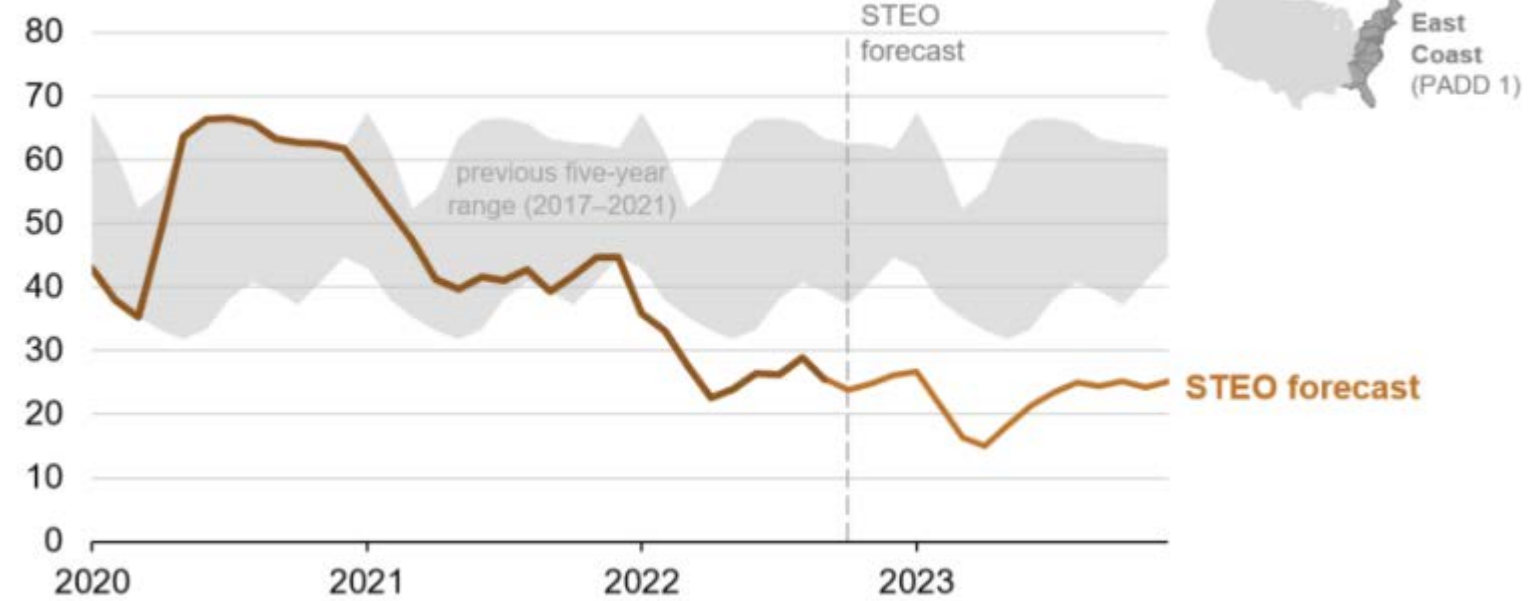
Winter Fuels Outlook, October 2022

Many households across the United States are likely to spend more on energy in the winter of 2022–23 compared with recent winters. Higher forecast energy expenditures are the result of higher fuel prices, combined with higher heating demand because of a forecast of slightly colder weather than last winter.

Based on NOAA's most recent winter forecast, we assume temperatures for the winter of 2022–23 in most of the country will be slightly colder than both last winter and the average winter for the previous 10 winters. We use heating degree days (HDDs) as a measure of how cold temperatures are compared with a base temperature—more HDDs indicate colder temperatures. On average, we expect 6% more population-weighted HDDs for the winter of 2022–23 across the United States than last winter and 2% more than the previous 10-winter average. Regionally, changes from last winter are fairly consistent. We forecast that the Northeast, Midwest, and West will all have 5% to 6% more HDDs this winter than winter 2021–22 and that HDDs in the South will be 9% more than last winter.

End-of-month East Coast distillate fuel inventories (2020–2023)

million barrels



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook, October 2022



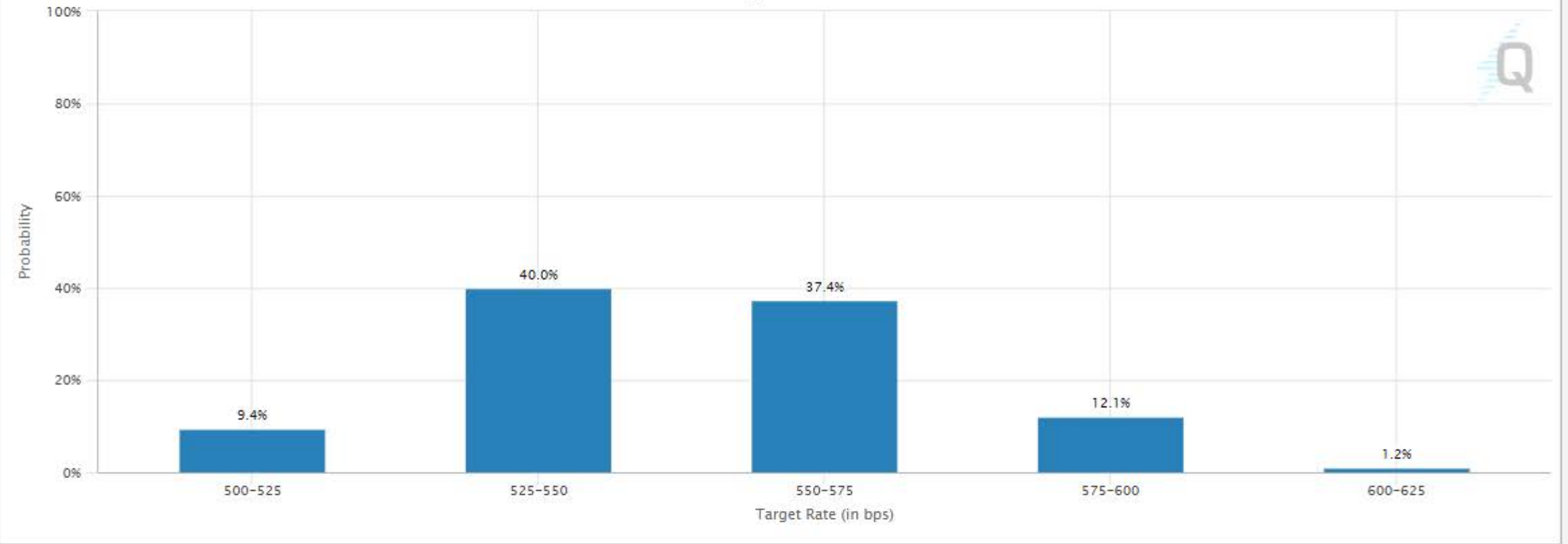
Target Rate	22 Mar23	3 May23	14 Jun23	26 Jul23	20 Sep23	1 Nov23	13 Dec23	31 Jan24	20 Mar24	1 May24	19 Jun24	31 Jul24	25 Sep24	8 Nov24	18 Dec24
-------------	----------	---------	----------	-----------------	----------	---------	----------	----------	----------	---------	----------	----------	----------	---------	----------

- Current
- Compare
- Probabilities
- Historical
- Historical
- Downloads
- Prior Hikes
- Dot Plot
- Chart
- Table

MEETING INFORMATION						PROBABILITIES		
MEETING DATE	CONTRACT	EXPIRES	MID PRICE	PRIOR VOLUME	PRIOR OI	EASE	NO CHANGE	HIKE
26 Jul 2023	ZQN3	31 Jul 2023	94.6225	32,037	194,353	0.0 %	0.0 %	100.0 %

TARGET RATE PROBABILITIES FOR 26 JUL 2023 FED MEETING

Current target rate is 450-475



TARGET RATE (BPS)	PROBABILITY(%)			
	NOW *	1 DAY 6 MAR 2023	1 WEEK 28 FEB 2023	1 MONTH 7 FEB 2023
475-500	0.0%	0.0%	0.0%	11.4%
500-525	9.4%	7.7%	13.3%	48.0%
525-550	40.0%	38.6%	45.2%	36.4%
550-575	37.4%	39.5%	33.9%	4.0%
575-600	12.1%	13.1%	7.4%	0.1%
600-625	1.2%	1.1%	0.2%	0.0%