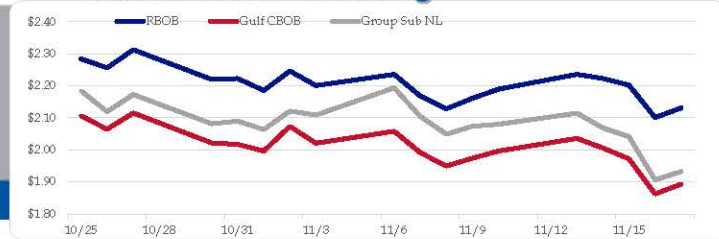


**Gasoline**

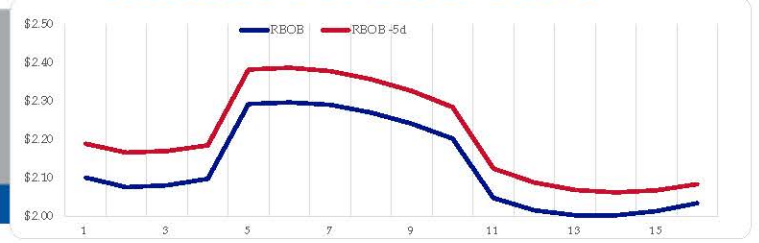
	RBOB	Change	Gulf CBOB	Change	Group Sub NL	Change	Gulf Basis	Group Basis	LA Basis
11/17	\$2.1311	<b>\$0.0300</b>	\$1.8928	<b>\$0.0303</b>	\$1.9326	<b>\$0.0265</b>	\$ (0.2389)	\$ (0.1988)	\$ 0.3045
11/16	\$2.1011	<b>-\$0.1007</b>	\$1.8625	<b>-\$0.1096</b>	\$1.9061	<b>-\$0.1347</b>	\$ (0.2387)	\$ (0.1950)	\$ 0.3060
11/15	\$2.2018	<b>-\$0.0210</b>	\$1.9720	<b>-\$0.0336</b>	\$2.0408	<b>-\$0.0279</b>	\$ (0.2298)	\$ (0.1611)	\$ 0.4710
11/14	\$2.2228	<b>-\$0.0131</b>	\$2.0056	<b>-\$0.0301</b>	\$2.0687	<b>-\$0.0463</b>	\$ (0.2172)	\$ (0.1542)	\$ 0.4960
11/13	\$2.2359	<b>\$0.0464</b>	\$2.0357	<b>\$0.0392</b>	\$2.1150	<b>\$0.0350</b>	\$ (0.2002)	\$ (0.1210)	\$ 0.4845
11/10	\$2.1895	<b>\$0.0287</b>	\$1.9965	<b>\$0.0225</b>	\$2.0800	<b>\$0.0065</b>	\$ (0.1930)	\$ (0.1095)	\$ 0.4397
11/9	\$2.1608	<b>\$0.0323</b>	\$1.9741	<b>\$0.0245</b>	\$2.0735	<b>\$0.0248</b>	\$ (0.1868)	\$ (0.0873)	\$ 0.4396
11/8	\$2.1285	<b>-\$0.0392</b>	\$1.9496	<b>-\$0.0417</b>	\$2.0487	<b>-\$0.0555</b>	\$ (0.1790)	\$ (0.0798)	\$ 0.4468

RBOB Technicals		
Indicator	Direction	Resistance
MACD	Neutral	2.9936 2023 High
Stochastics	Bearish	2.7703 Sep High
RSI	Neutral	2.1220 2023 Low
ADX	Bearish	2.0204 Dec 2022 Low
Momentum	Neutral	<b>Support</b>
Bias:	Neutral	

**Gasoline History**



**Gasoline Forward Curve**

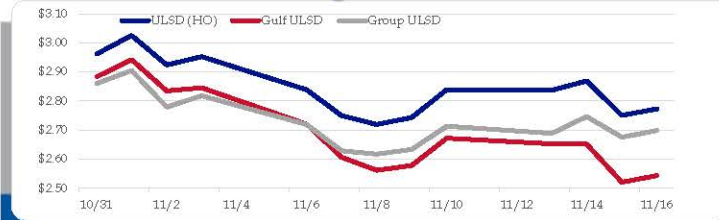


**Diesel**

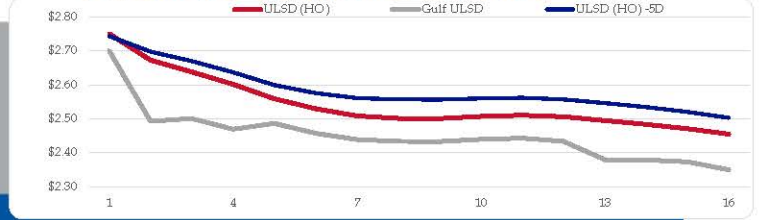
	ULSD (HO)	Change	Gulf ULSD	Change	Group ULSD	Change	Gulf Basis	Group Basis	LA Basis
11/17	\$2.7726	<b>\$0.0224</b>	\$2.5434	<b>\$0.0224</b>	\$2.6982	<b>\$0.0226</b>	\$ (0.2302)	\$ (0.0746)	\$ 0.2805
11/16	\$2.7502	<b>-\$0.1186</b>	\$2.5205	<b>-\$0.1310</b>	\$2.6756	<b>-\$0.0710</b>	\$ (0.2297)	\$ (0.0746)	\$ 0.2795
11/15	\$2.8687	<b>\$0.0316</b>	\$2.6515	<b>-\$0.0011</b>	\$2.7466	<b>\$0.0580</b>	\$ (0.2172)	\$ (0.1221)	\$ 0.2795
11/14	\$2.8371	<b>-\$0.0022</b>	\$2.6526	<b>-\$0.0194</b>	\$2.6886	<b>-\$0.0246</b>	\$ (0.1845)	\$ (0.1485)	\$ 0.2795
11/13	\$2.8393	<b>\$0.0962</b>	\$2.6720	<b>\$0.0936</b>	\$2.7132	<b>\$0.0799</b>	\$ (0.1674)	\$ (0.1262)	\$ 0.2595
11/10	\$2.7431	<b>\$0.0240</b>	\$2.5784	<b>\$0.0166</b>	\$2.6333	<b>\$0.0162</b>	\$ (0.1648)	\$ (0.1098)	\$ 0.2345
11/9	\$2.7191	<b>-\$0.0301</b>	\$2.5617	<b>-\$0.0446</b>	\$2.6171	<b>-\$0.0113</b>	\$ (0.1574)	\$ (0.1020)	\$ 0.2345
11/8	\$2.7492	<b>-\$0.0892</b>	\$2.6063	<b>-\$0.1137</b>	\$2.6285	<b>-\$0.0903</b>			

HO Technicals		
Indicator	Direction	Resistance
MACD	Neutral	3.5800 2003 High
Stochastics	Bearish	3.5092 Sep High
RSI	Neutral	2.7175 Nov Low
ADX	Bearish	2.3750 July Low
Momentum	Neutral	<b>Support</b>
Bias:	Neutral	

**Diesel History**



**Diesel Forward Curve**



**Crude**

	WTI	Change	Brent	Change
11/17	\$74.11	<b>\$1.21</b>	\$78.72	<b>\$1.30</b>
11/16	\$72.90	<b>-\$3.76</b>	\$77.42	<b>-\$3.76</b>
11/15	\$76.66	<b>-\$1.60</b>	\$81.18	<b>-\$1.29</b>
11/14	\$78.26	<b>\$0.00</b>	\$82.47	<b>-\$0.05</b>
11/13	\$78.26	<b>\$1.09</b>	\$82.52	<b>\$2.51</b>
CPL	Line 1	Change	Line 2	Change
space	0.1713	<b>\$0.0087</b>	\$0.1005	<b>\$0.0012</b>

**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
11/16	\$5.32	\$32.96	\$14.54	\$16.38	\$0.80	\$28.44	\$10.02	\$11.86	\$ 26.17
11/15	\$6.16	\$34.70	\$15.68	\$17.58	\$1.64	\$30.18	\$11.16	\$13.06	\$ 30.93
11/14	\$5.98	\$33.15	\$15.03	\$16.84	\$1.77	\$28.94	\$10.82	\$12.63	\$ 29.30
11/13	\$7.24	\$33.96	\$16.15	\$17.93	\$2.98	\$29.70	\$11.89	\$13.67	\$ 30.94
	\$6.68	\$31.12	\$14.83	\$16.46	\$3.84	\$28.28	\$11.99	\$13.62	\$ 29.94

**RINs and Price Drivers**

Current Year Biodiesel RINs			Current Year Ethanol RINs		
	Settle	Net Change		Settle	Net Change
	0.8620	<b>0.002</b>		0.8525	<b>-0.006</b>
Price Drivers			Price Drivers		
	Settle	Net Change		Settle	Net Change
Soybeans	1360.25	<b>-8.750</b>	Ethanol	1.89	<b>-0.001</b>
Soybean Oil	51.63	<b>0.390</b>	Com	474.75	<b>-3.500</b>
			Com Crush	0.193	
BOHO Spread	1.122		RVO Estimate		
			Per Gallon	\$ 0.1080	\$ (0.0010)
Soy Crush	564.60		Per Barrel	\$ 4.54	\$ (0.04)

**Economic Indicators**

**Commodity Futures**

	Settle	Change		Settle	Change
S&P 500 Futures	4,533	<b>9.25</b>	US NatGas	3.062	<b>-0.128</b>
DJIA	34,945	<b>-45.74</b>	TTF NatGas	14.64	<b>-0.4</b>
EUR/USD	1.0869	<b>0.0009</b>	Gold	1,984	<b>51.3</b>
USD Index	104.23	<b>-0.17</b>	Silver	23.89	<b>1.7</b>
US 10 YR YIELD	4.45%	<b>-0.08</b>	Copper	408.00	<b>4.700</b>
US 2 YR YIELD	4.83%	<b>-0.07</b>	FCO J	1360.25	<b>-8.75</b>
Oil Volatility Index	39.51	<b>3.02</b>	Wheat	553.50	<b>-3.25</b>
S&P Volatility Index (VIX)	14.18	<b>0.14</b>	Butane	0.855	<b>-0.008</b>
Nikkei 225 Index	33,415	<b>50.00</b>	Propane	0.628	<b>-0.006</b>
			Bitcoin	36,040	<b>460</b>

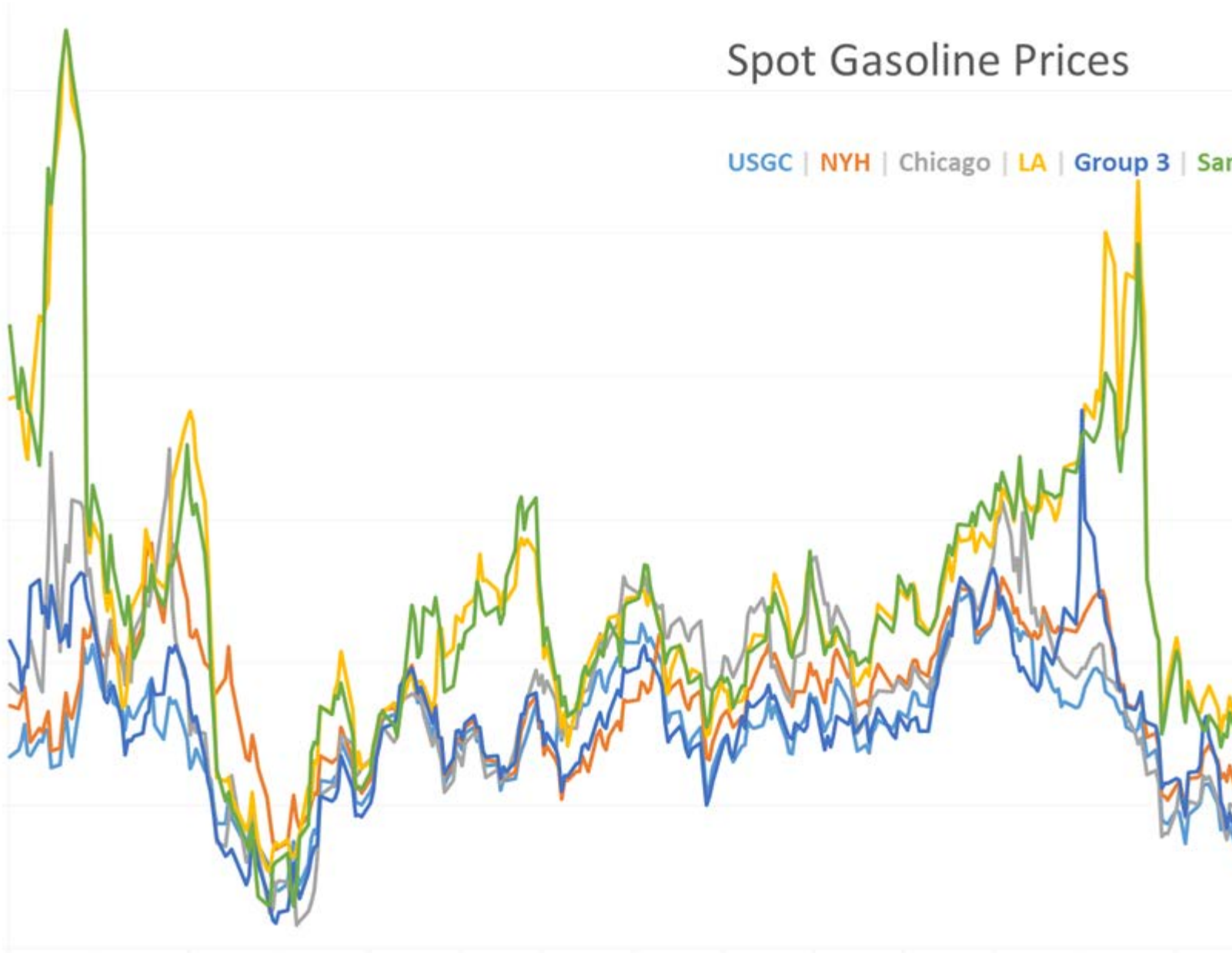
\*SOURCES: Nymex, CBOT, NYSE, ICE, NASDAQ, CME Group, CBOE. Prices delayed.

# Spot Gasoline Prices

USGC | NYH | Chicago | LA | Group 3 | San Fran

\$4.70  
\$4.20  
\$3.70  
\$3.20  
\$2.70  
\$2.20  
\$1.70

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

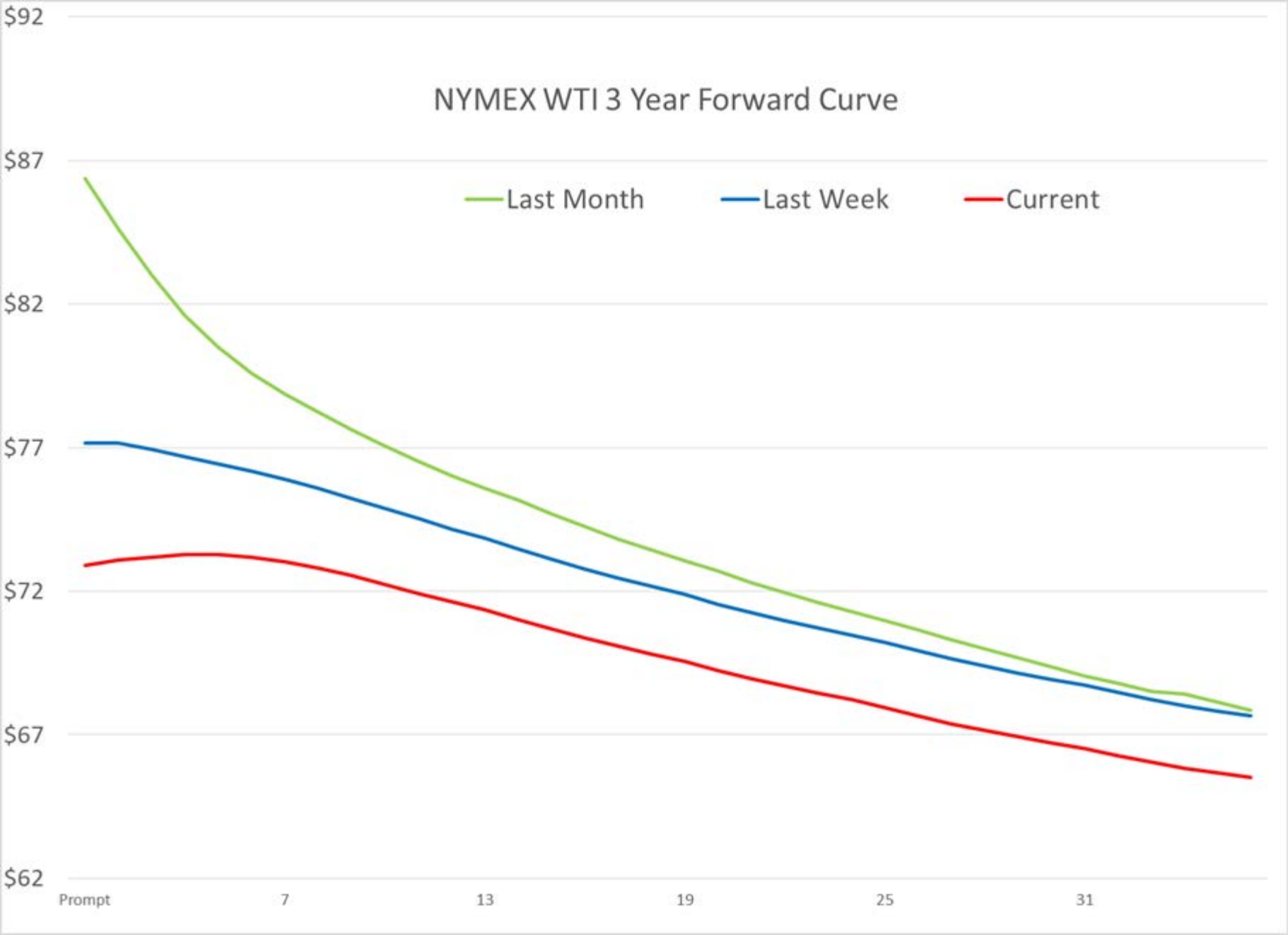


# Spot Diesel Pricing

USGC | ULSD Futures | LA CARB #2 | Group 3 | San Fran CARB #2 | NYH Barge #2 | Chicago

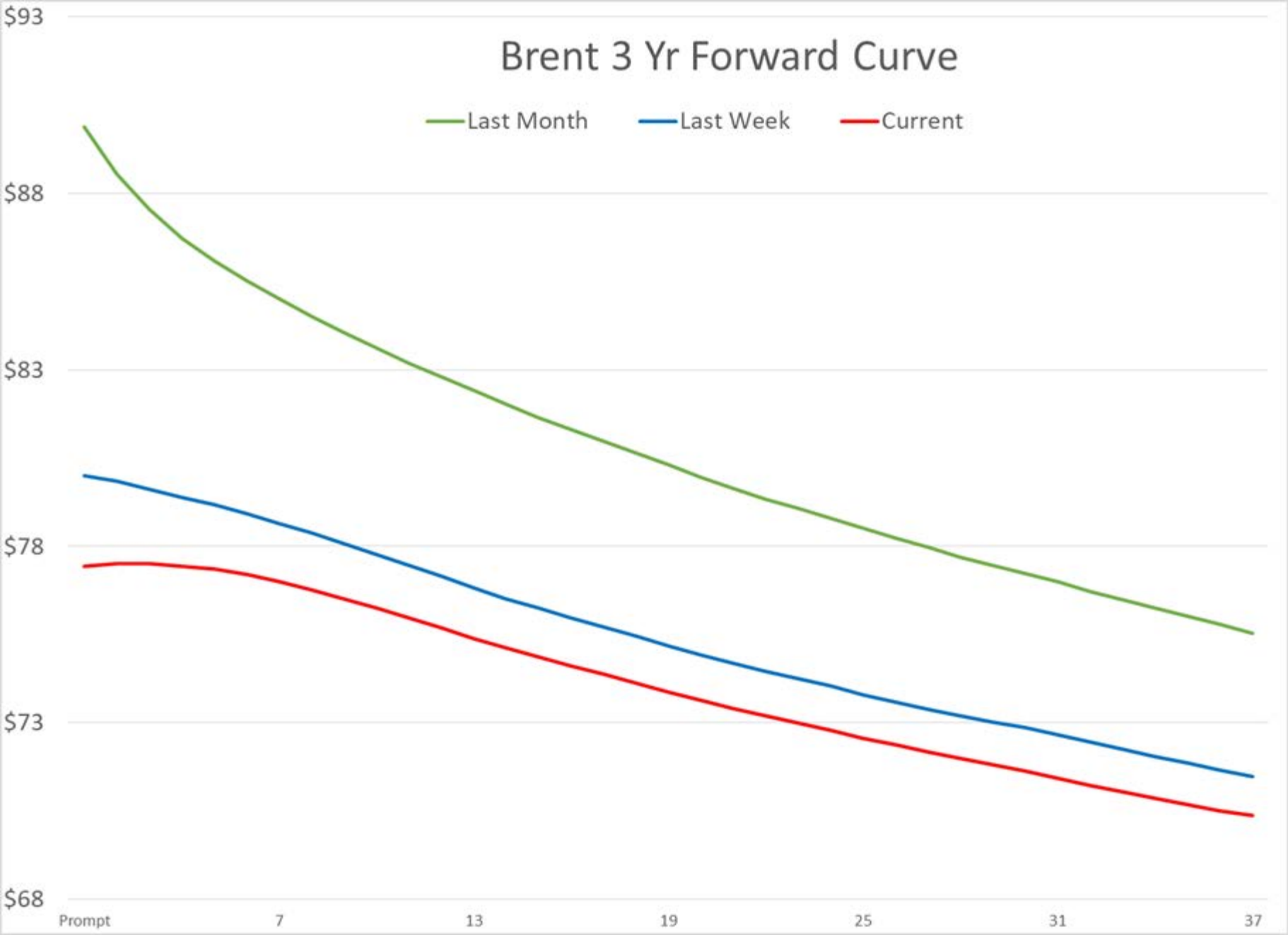


# NYMEX WTI 3 Year Forward Curve

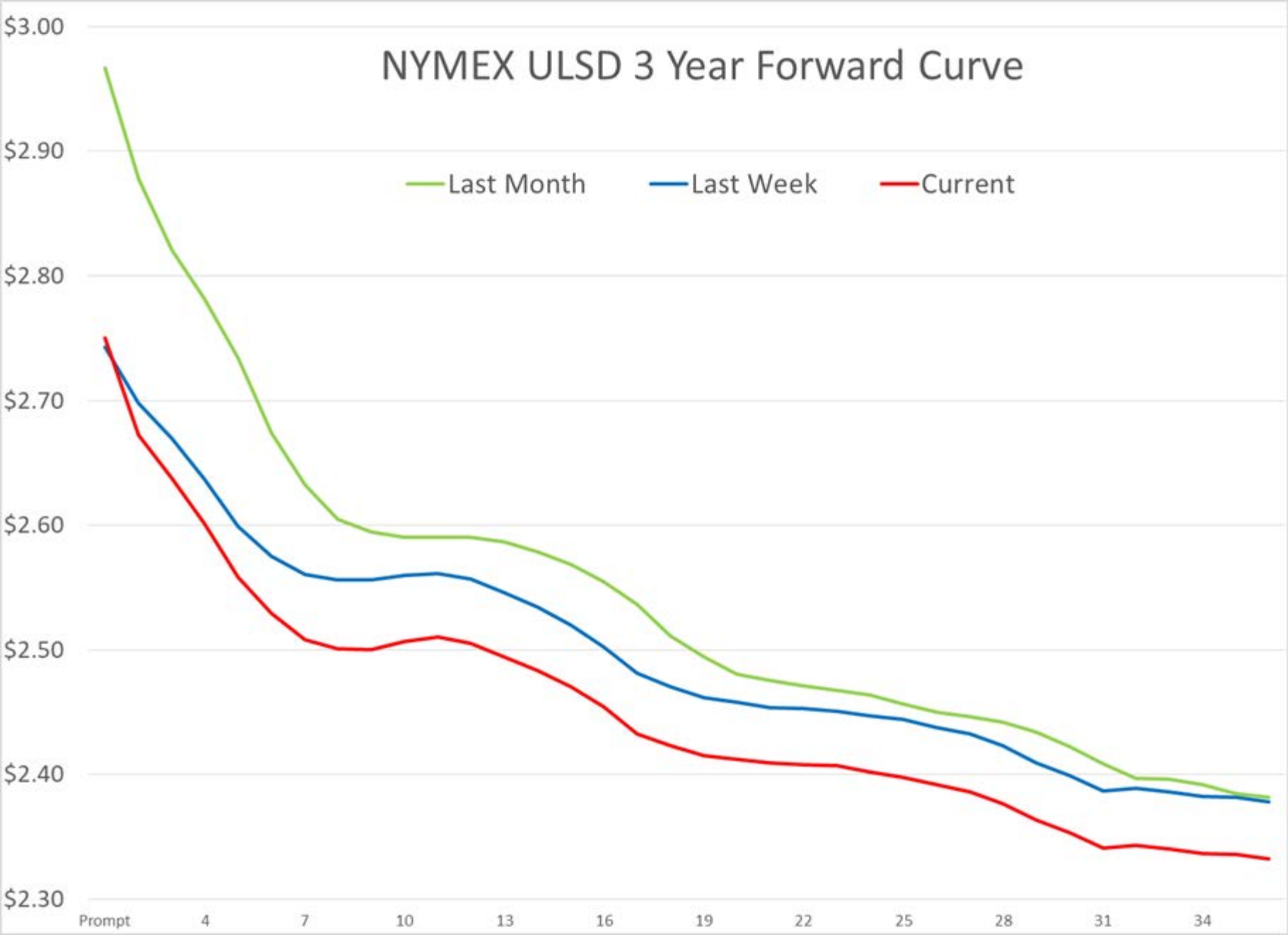


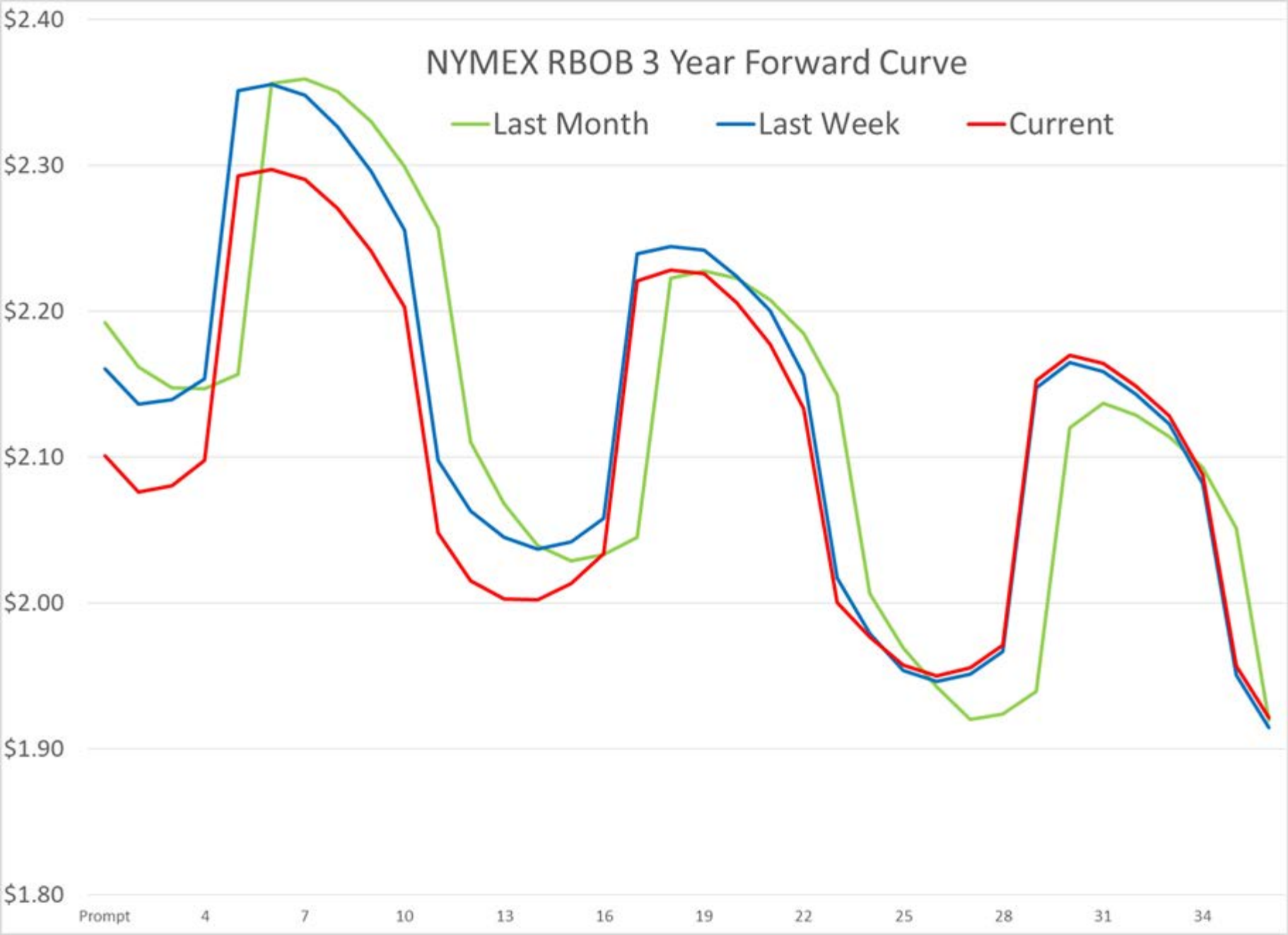
# Brent 3 Yr Forward Curve

— Last Month    — Last Week    — Current



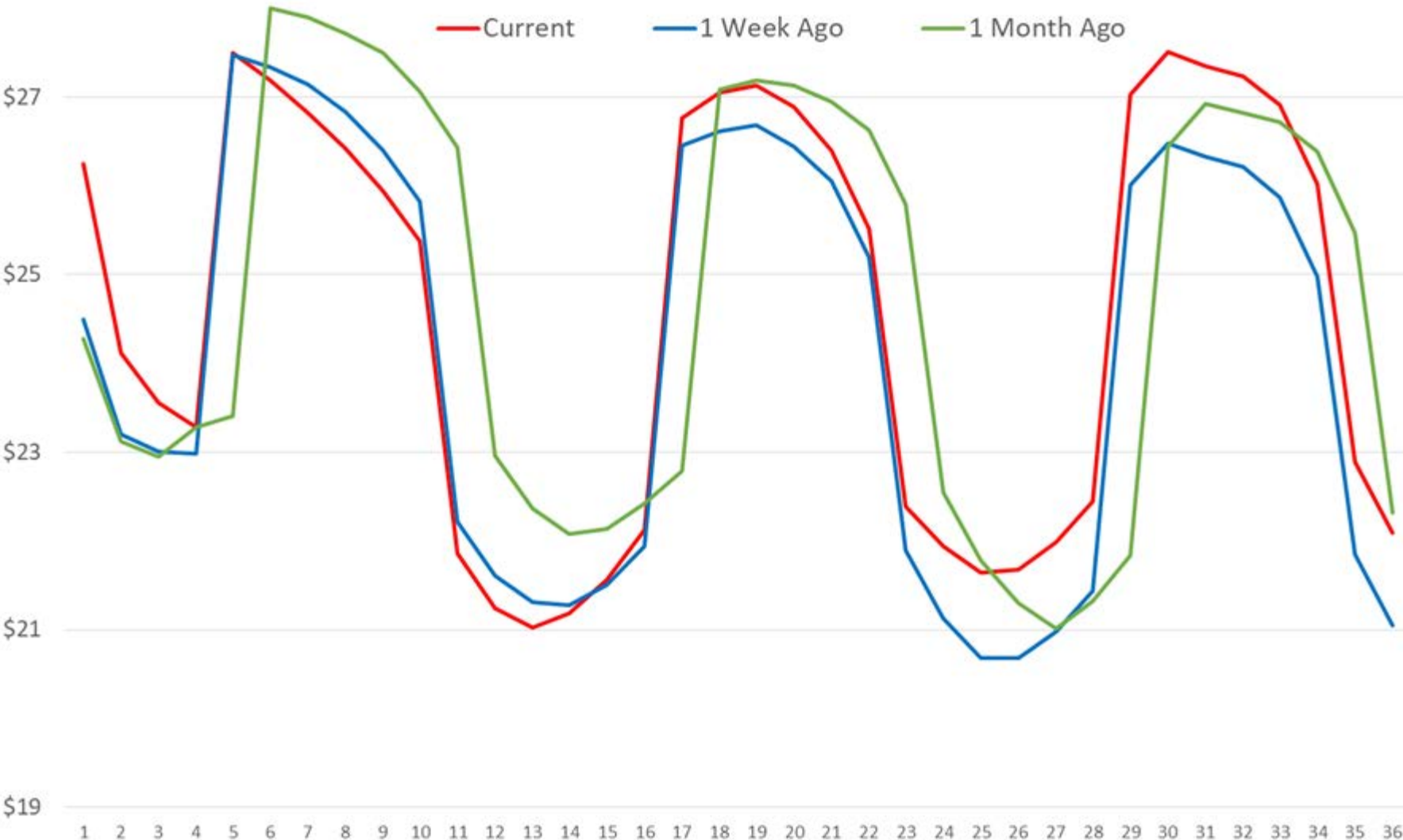
# NYMEX ULSD 3 Year Forward Curve





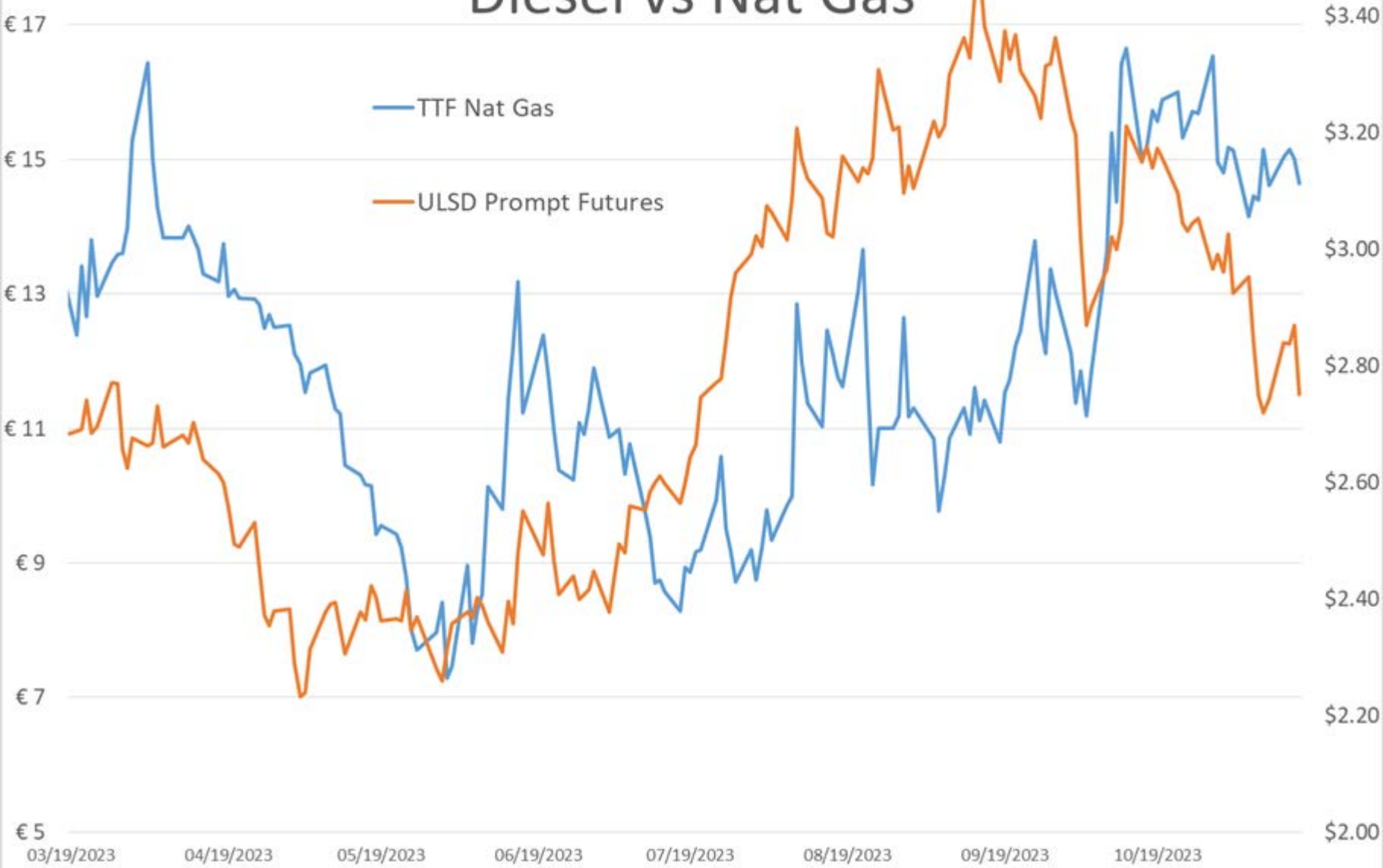
# Refinery Margin Forward Curve

5/3/2 Crack (WTI/RBOB/ULSD futures)\$/Barrel 36 Months

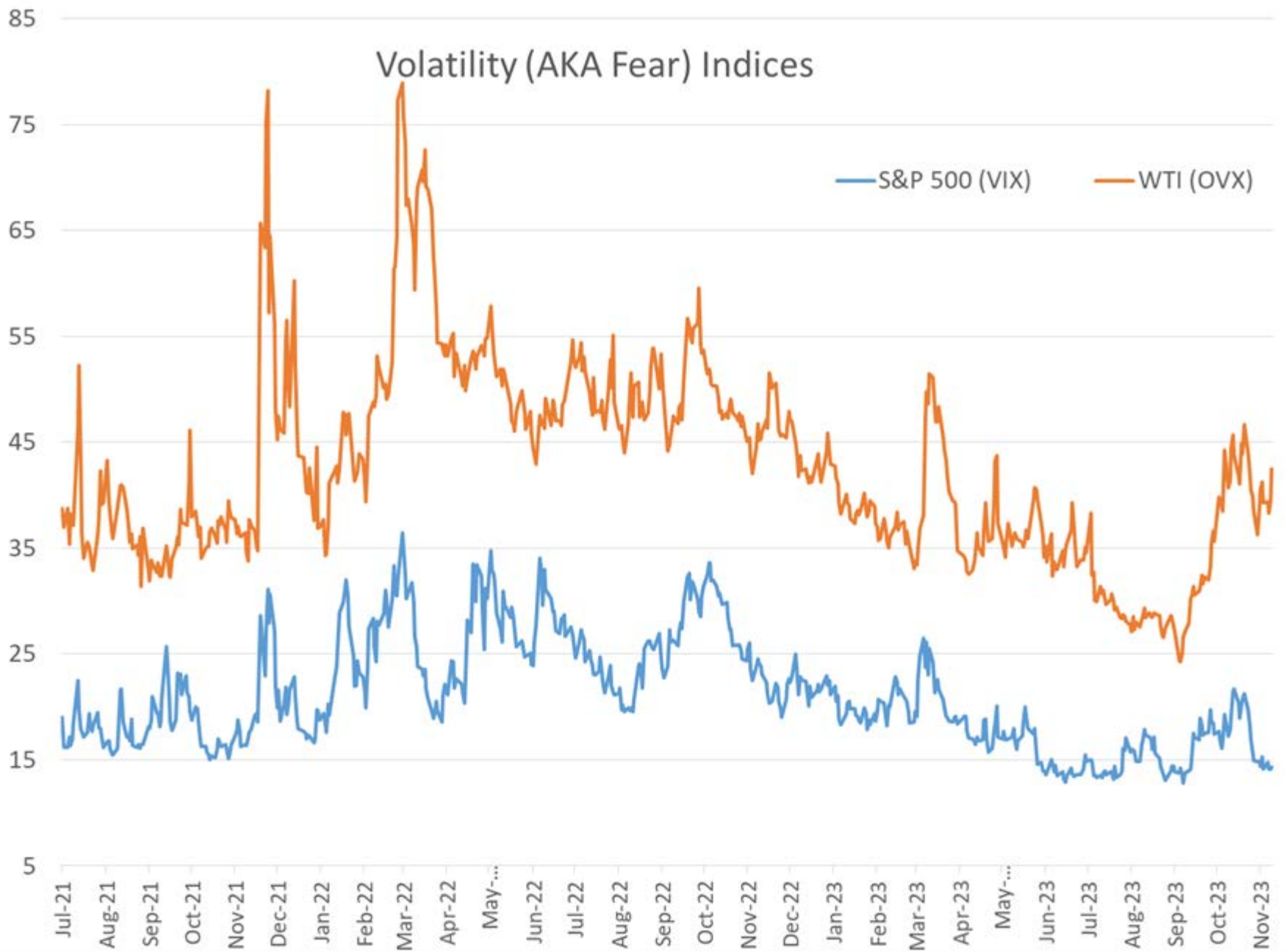




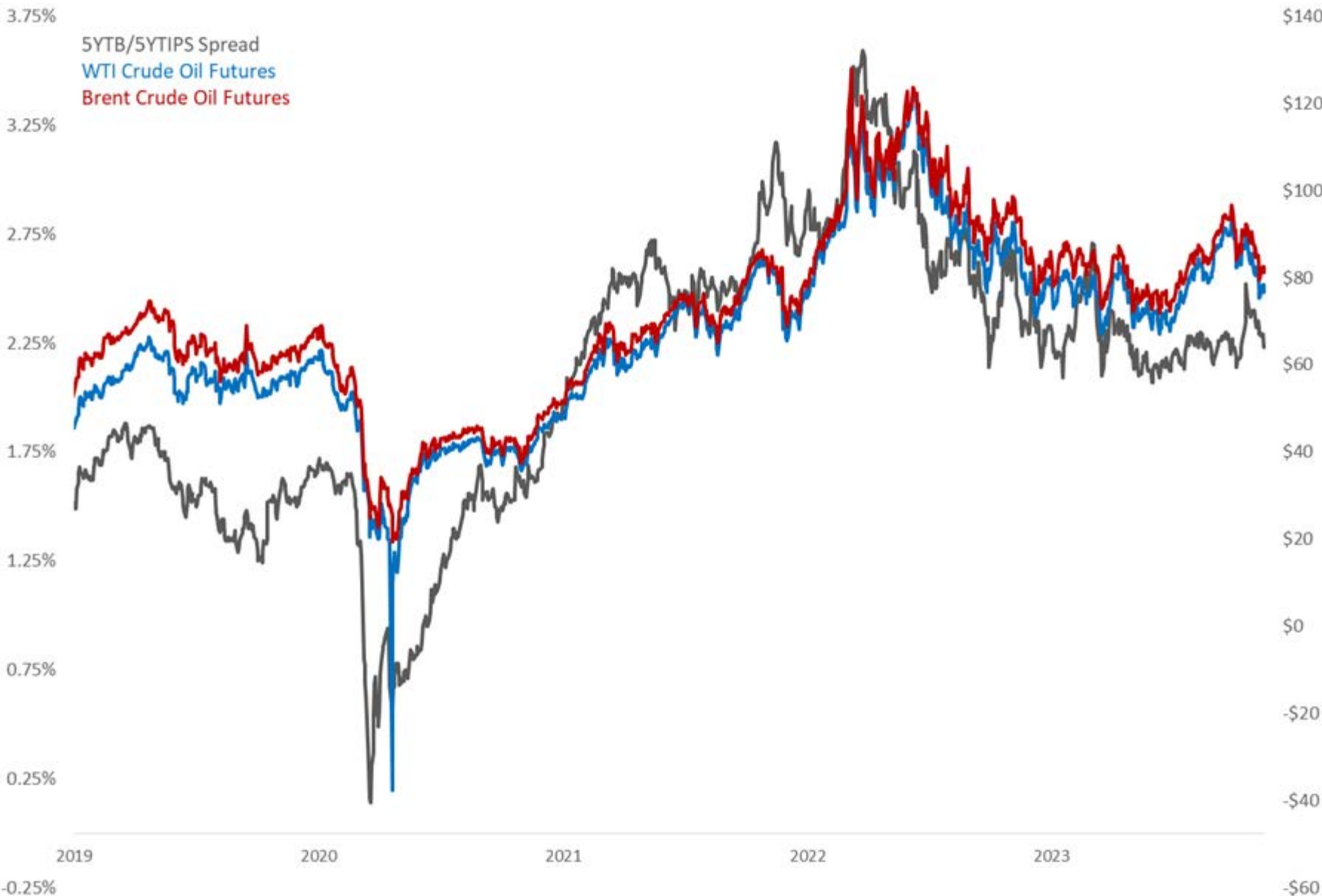
# Diesel vs Nat Gas



# Volatility (AKA Fear) Indices



# 5-Year Treasury Bond/5-Year TIPS % Spread vs Crude Oil Prices

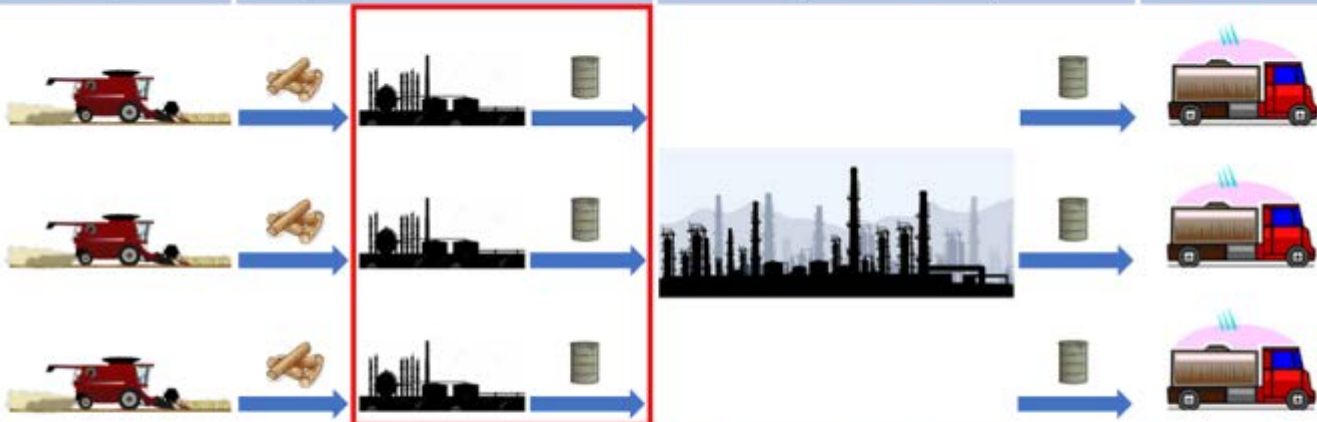


Renewable biomass collected in multiple areas

Biomass is sent to local collection/pre-processing facility to produce a biointermediate

Biointermediates from multiple facilities are sent to a renewable fuel production facility


Renewable fuel is produced and distributed



e.g., A party gathers renewable biomass in numerous locations and converts it to biocrude

e.g., biocrude is shipped to a single refinery that converts the biocrude to cellulosic gasoline and diesel

 Biointermediate is produced

Only the following are allowed to be used as biointermediates as defined in [40 CFR section 80.1401](#) :