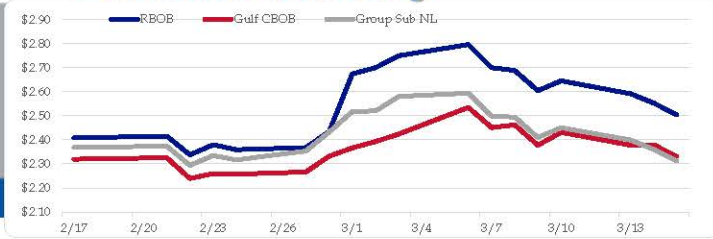


Gasoline

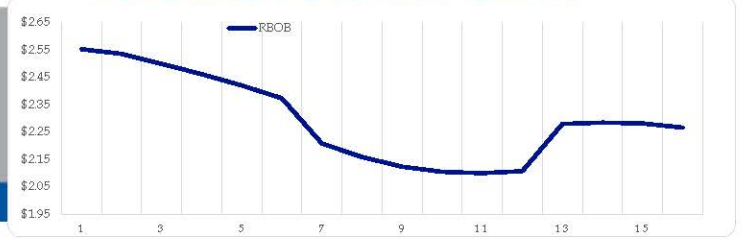
	RBOB	Change	Gulf CBOB	Change	Group Sub NL	Change	Gulf Basis	Group Basis	LA Basis
3/15	\$2.5037	-\$0.0493	\$2.3304	-\$0.0490	\$2.3110	-\$0.0488	\$(0.1739)	\$(0.1931)	\$(0.0005)
3/14	\$2.5530	-\$0.0384	\$2.3794	\$0.0015	\$2.3598	-\$0.0393	\$(0.1737)	\$(0.1933)	\$0.0010
3/13	\$2.5914	-\$0.0544	\$2.3779	-\$0.0533	\$2.3991	-\$0.0513	\$(0.2136)	\$(0.1923)	\$0.0310
3/10	\$2.6458	\$0.0407	\$2.4311	\$0.0537	\$2.4504	\$0.0400	\$(0.2147)	\$(0.1954)	\$0.1110
3/9	\$2.6051	-\$0.0838	\$2.3774	-\$0.0847	\$2.4104	-\$0.0840	\$(0.2277)	\$(0.1947)	\$0.1095
3/8	\$2.6889	-\$0.0118	\$2.4622	\$0.0107	\$2.4944	-\$0.0040	\$(0.2268)	\$(0.1945)	\$0.1647
3/7	\$2.7007	-\$0.0958	\$2.4515	-\$0.0836	\$2.4984	-\$0.0958	\$(0.2493)	\$(0.2023)	\$0.2146
3/6	\$2.7965	\$0.0461	\$2.5351	\$0.1111	\$2.5942	\$0.0136	\$(0.2615)	\$(0.2023)	\$0.2868

RBOB Technicals		
Indicator	Direction	Resistance
MACD	Neutral	3.0221 Oct High
Stochastics	Bearish	2.8122 2023 High
RSI	Neutral	2.4400 Chart Gap
ADX	Bullish Trend	2.0204 Dec 2022 Low
Momentum	Bearish	Support
Bias:	Neutral	

Gasoline History



Gasoline Forward Curve



Diesel

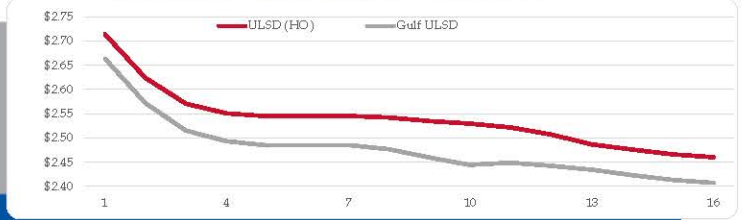
	ULSD (HO)	Change	Gulf ULSD	Change	Group ULSD	Change	Gulf Basis	Group Basis	LA Basis
3/15	\$2.6574	-\$0.0570	\$2.6493	-\$0.0563	\$2.6018	-\$0.0568	\$(0.0095)	\$(0.0559)	\$(0.0545)
3/14	\$2.7144	-\$0.0471	\$2.7055	-\$0.0551	\$2.6586	-\$0.0771	\$(0.0090)	\$(0.0559)	\$(0.0555)
3/13	\$2.7615	-\$0.0114	\$2.7606	\$0.0122	\$2.7357	-\$0.0275	\$(0.0009)	\$(0.0258)	\$(0.0255)
3/10	\$2.7729	\$0.1040	\$2.7484	\$0.1261	\$2.7632	\$0.1054	\$(0.0245)	\$(0.0097)	\$(0.0255)
3/9	\$2.6689	-\$0.0730	\$2.6223	-\$0.0699	\$2.6578	-\$0.0694	\$(0.0466)	\$(0.0111)	\$(0.0255)
3/8	\$2.7419	-\$0.0566	\$2.6922	-\$0.0627	\$2.7271	-\$0.0534	\$(0.0497)	\$(0.0148)	\$(0.0255)
3/7	\$2.7975	-\$0.0891	\$2.7549	-\$0.0846	\$2.7805	-\$0.0891	\$(0.0426)	\$(0.0170)	\$(0.0255)
3/6	\$2.8866	-\$0.0265	\$2.8394	-\$0.0302	\$2.8696	-\$0.0188			

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

Diesel History



Diesel Forward Curve



Crude

	WTI	Change	Brent	Change
3/15	\$69.62	-\$1.71	\$75.70	-\$1.75
3/14	\$71.33	-\$3.47	\$77.45	-\$3.32
3/13	\$74.80	-\$1.88	\$80.77	-\$2.01
3/10	\$76.68	\$0.96	\$82.78	\$1.19
3/9	\$75.72	-\$0.94	\$81.59	-\$1.07
CPL space	Line 1	Change	Line 2	Change
		\$0.0043	-\$0.0158	-\$0.0026

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
3/15		\$28.60	\$42.30	\$33.17	\$34.08	\$22.48	\$36.18	\$27.05	\$27.96	28.49
3/14		\$25.07	\$41.14	\$30.43	\$31.50	\$19.10	\$35.17	\$24.46	\$25.53	30.67
3/13		\$25.43	\$38.75	\$29.87	\$30.76	\$19.33	\$32.65	\$23.77	\$24.66	30.62
3/10		\$24.13	\$34.42	\$27.56	\$28.25	\$18.26	\$28.55	\$21.69	\$22.38	28.98

RINs and Price Drivers

Current Year Biodiesel RINs			Current Year Ethanol RINs		
	Settle	Net Change		Settle	Net Change
	1.5620	-0.005		1.5285	-0.007
Price Drivers			Price Drivers		
	Settle	Net Change		Settle	Net Change
Soybeans	1493.75	-5.750	Ethanol	2.16	0.000
Soybean Oil	56.18	-0.730	Com	620.75	3.250
BOHO Spread	1.499		Com Crush	-0.056	
Soy Crush	613.63		RVO Estimate		
			Per Gallon	\$ 0.1720	\$(0.0010)
			Per Barrel	\$ 7.22	\$(0.04)

Economic Indicators

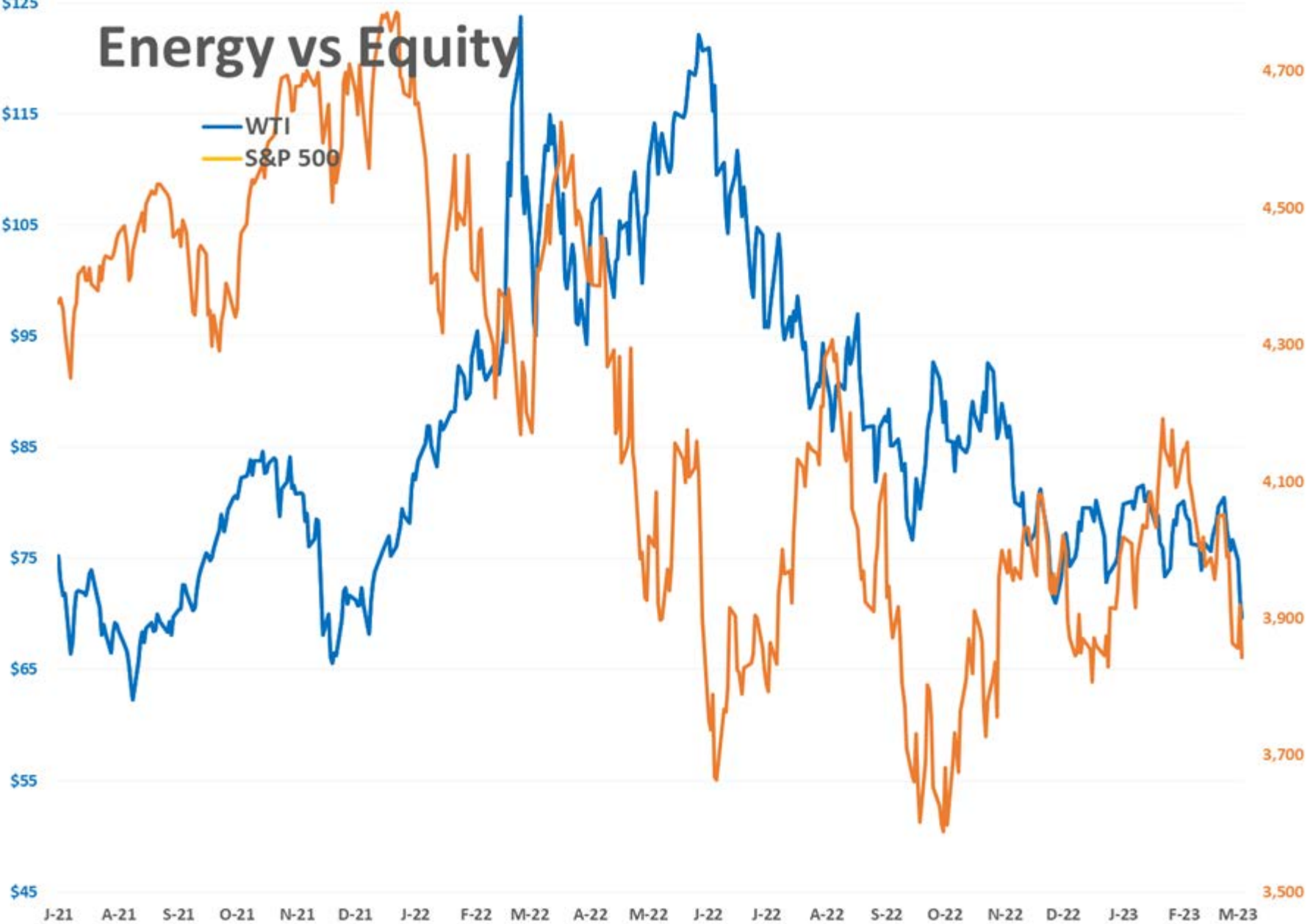
Commodity Futures

	Settle	Change		Settle	Change
S&P 500 Futures	3,843	-78.00	NatGas	2.573	
DJIA	32,155	336.26	Gold	1,906	0.0
EUR/USD	1.0763	-0.0173	Silver	21.93	-0.3
USD Index	103.22	1.04	Copper	4.01	-0.131
US 10 YR YIELD	3.64%	0.09	FCOJ	244.60	-1.00
US 2 YR YIELD	4.20%	0.17	Wheat	696.25	3.25
Oil Volatility Index	38.13	9.28	Butane	0.991	
S&P Volatility Index (VIX)	26.52	-2.79	Propane	0.802	
Nikkei 225 Index	27,285	-845.00	Bitcoin	25,240	-460

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

Energy vs Equity

WTI
S&P 500

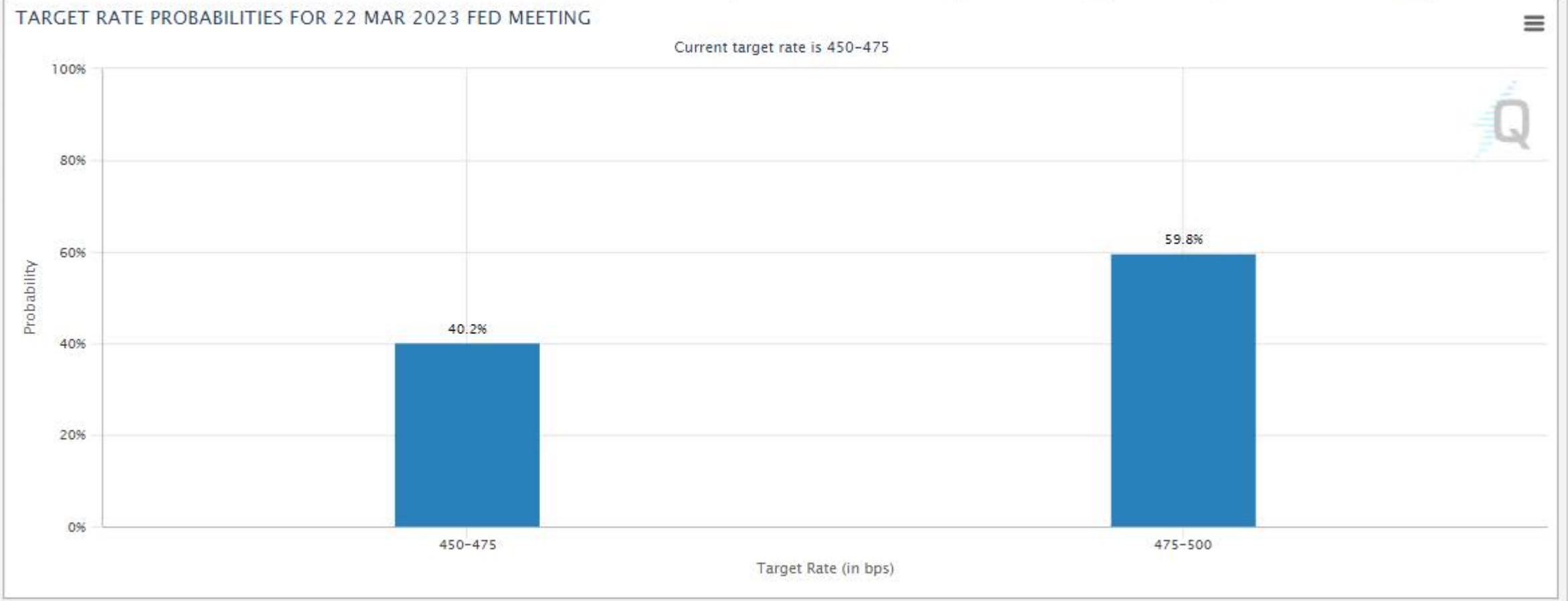




- Target Rate
- 22 Mar23
- 3 May23
- 14 Jun23
- 26 Jul23
- 20 Sep23
- 1 Nov23
- 13 Dec23
- 31 Jan24
- 20 Mar24
- 1 May24
- 19 Jun24
- 31 Jul24
- 25 Sep24
- 6 Nov24
- 18 Dec24

- 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
22 Mar 2023	ZQH3	31 Mar 2023	96.3688	60,268	176,710	0.0 %	40.2 %	59.8 %



TARGET RATE (BPS)	PROBABILITY(%)			
	NOW *	1 DAY 14 MAR 2023	1 WEEK 8 MAR 2023	1 MONTH 15 FEB 2023
450-475 (Current)	40.2%	30.6%	0.0%	0.0%
475-500	59.8%	69.4%	21.4%	87.8%
500-525	0.0%	0.0%	78.6%	12.2%

* Data as of 15 Mar 2023 06:53:03 CT

1/1/2024 and forward are projected meeting dates

OPEC crude oil production

According to secondary sources, total **OPEC-13 crude oil production** averaged 28.92 mb/d in February 2023, higher by 117 tb/d m-o-m. Crude oil output increased mainly in Nigeria, Saudi Arabia and Congo, while production in Angola and Iraq declined.

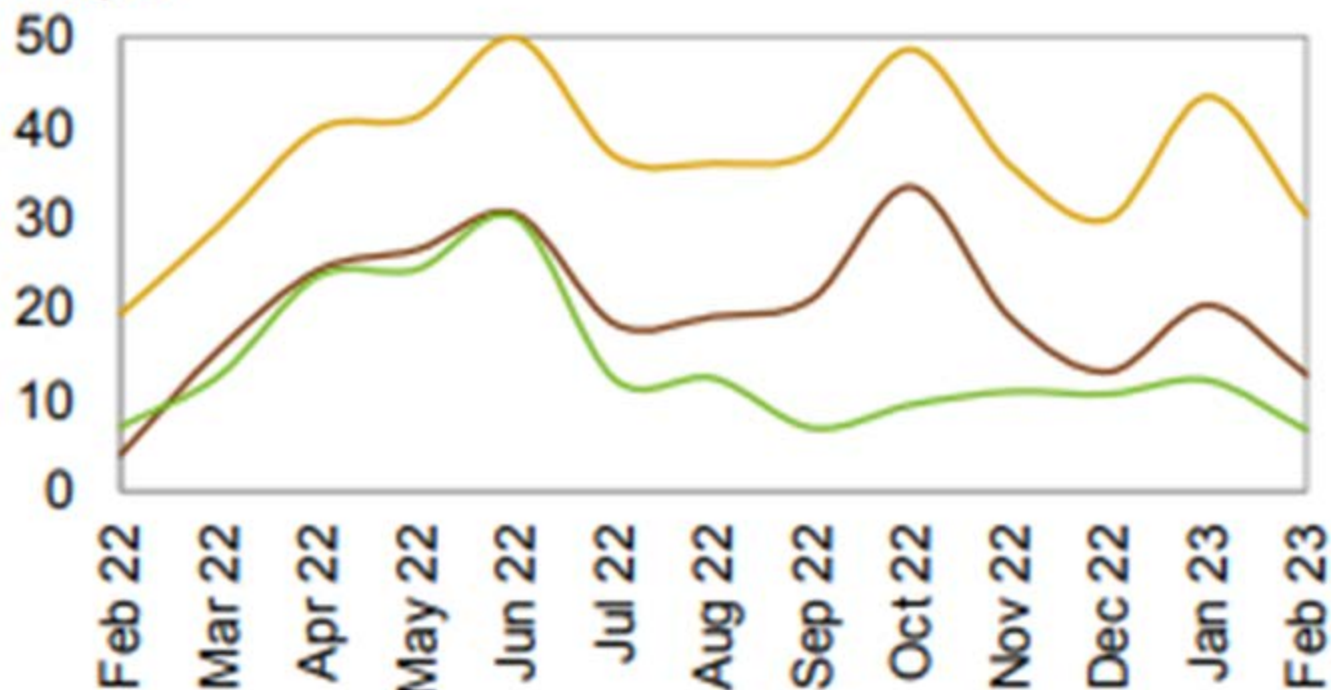
Table 5 - 7: OPEC crude oil production based on *secondary sources*, tb/d

Secondary sources	2021	2022	2Q22	3Q22	4Q22	Dec 22	Jan 23	Feb 23	Change Feb/Jan
Algeria	913	1,017	1,015	1,040	1,030	1,015	1,016	1,017	1
Angola	1,122	1,140	1,173	1,154	1,084	1,108	1,136	1,084	-52
Congo	263	261	266	264	252	240	255	276	21
Equatorial Guinea	98	84	90	90	64	60	54	63	9
Gabon	182	197	191	201	199	193	186	196	9
IR Iran	2,392	2,554	2,555	2,565	2,567	2,580	2,554	2,571	17
Iraq	4,046	4,438	4,440	4,522	4,503	4,468	4,412	4,387	-25
Kuwait	2,419	2,705	2,690	2,801	2,713	2,648	2,694	2,683	-11
Libya	1,143	981	743	976	1,153	1,159	1,148	1,164	16
Nigeria	1,372	1,204	1,209	1,063	1,171	1,271	1,308	1,380	72
Saudi Arabia	9,114	10,531	10,450	10,894	10,606	10,474	10,302	10,361	59
UAE	2,727	3,066	3,045	3,168	3,094	3,042	3,046	3,042	-4
Venezuela	553	678	709	662	667	661	696	700	4
Total OPEC	26,345	28,857	28,576	29,400	29,103	28,919	28,807	28,924	117

Notes: Totals may not add up due to independent rounding, given available secondary sources to date. Source: OPEC.

Graph 6 - 1: Refining margins

US\$/b



— WTI (US Gulf)
— Oman (Singapore)

— Brent (Rotterdam)

Sources: Argus and OPEC.