

Energy Sector – Overweight

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News Update

Continue positive oil price momentum

- **Bullish US data despite major shale oil plan to lift output**
- **Texas winter is expected to be milder than last year**
- **OPEC+ failed to reach production targets in January**
- **Saudi Arabia lifted OSP premium in Mar 22**

Winter demand and positive outcome following OPEC meeting have send Brent crude oil price above US\$90 per bbl, despite major US shale producer announcements to raise oil production by 10-25% this year.

Bullish US data despite major shale producers plan to lift output.

- **Surprise weekly US crude inventory draw.** US commercial crude oil inventory dropped by 1m bbls w-w, against the +1.8m bbls build, expected by the market. Movement in the oil products were mixed again. Gasoline inventories increased by another 2.2m bbls while distillate inventories saw a large draw, dropping by 2.4m bbls w-w.
- **Major US shale producers plan to hike output.** ExxonMobil announced a plan to increase its Permian production by 25% this year, while Chevron announced an increase of 10%. ExxonMobil's Permian production was at 460k b/d in 2021, while Chevron was at 608k b/d. That said, other listed independent shale gas producers, such as Pioneer Natural Resources Co., EOG Resources Inc., and Diamondback Energy Inc. are aware of the risks of growing too fast and have so far indicated supply increases of no more than 5% this year. Many drillers say they will never return to pre-pandemic production growth levels of up to 30% a year, in part due to rising costs for raw materials and labor, a lack of available financing and the large number of new wells it would require.
- **But actual data output is still slow.** US crude oil production dropped marginally w-w by 0.1m b/d to 11.5m b/d, and it is still well below its high of about 13m b/d in early 2020. Note, that the production declined marginally by 0.3m b/d YTD, despite a bullish oil momentum and against an EIA's growth forecast of 0.6m b/d.
- **Texas winter is expected to be milder than last year.** The benchmark U.S. natural gas price surged by more than 9% w-w as frigid weather and below-freezing temperatures in many parts of the United States stoked demand for heating and electricity. However, this week's Arctic blast is expected to be milder than last winter's storm in Feb 2021, which knocked out power plants and oil and gas wells, causing the largest-ever oil production decline in U.S. oil history. U.S. crude oil production has plunged by as much as 40% in Feb 21. Power outages last year have also led to the shutdown of several refineries in Texas, which removed an estimated 3m b/d or more in refining capacity. Chemical supply was also disrupted with close to 70% of US ethylene and over 80% of propylene capacity being offline. This represented 14% of the world's ethylene capacity and 11% of propylene capacity.

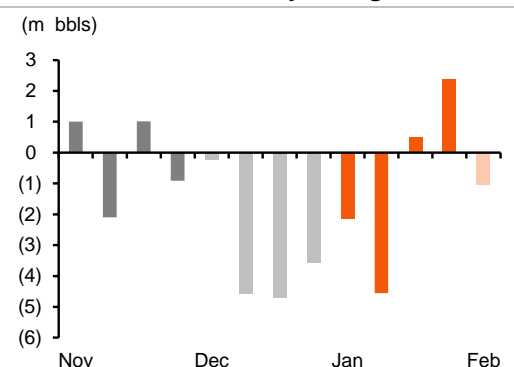
Ex 1: US Weekly data

('000 bbls)	Weekly change
Crude Oil	(1,047)
Gasoline	2,119
Distillates	(2,409)
Jet Kerosene	320

(kbpd)	Weekly change	% Change	Current number
Production	(100)	-0.9%	11,500
Refinery Runs	(247)	-1.6%	15,249

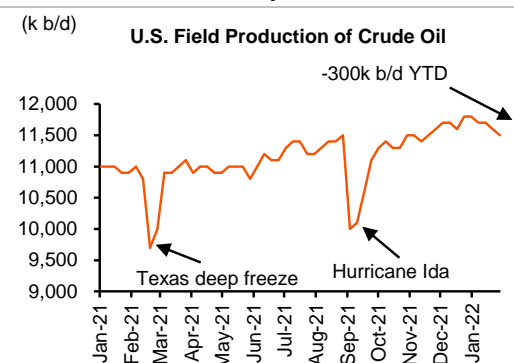
Source: EIA

Ex 2: US Crude Inventory Change



Source: EIA

Ex 3: US Crude oil Output



Source: EIA

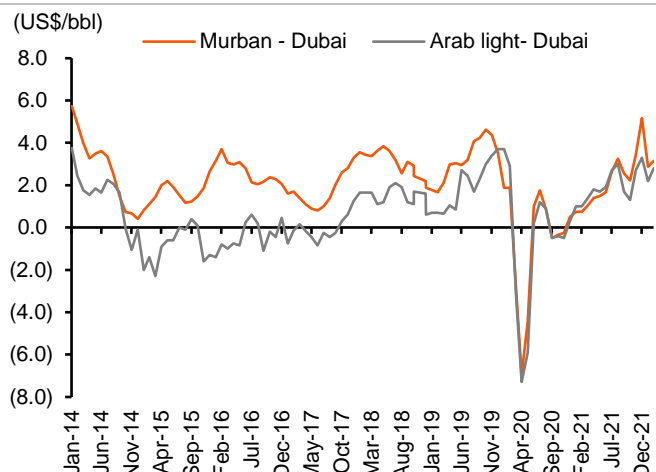
OPEC+ failed to reach production targets in January

- In line with our expectation, OPEC and its allies reaffirmed that they would not provide additional supplies beyond the previously agreed 400,000 b/d monthly. The Market responded to this positively, given that they were previously concerned about potential plans to ramp up the output faster while the oil price was still prevailing at high level.
- According to news report, OPEC has again failed to meet its own production targets in January, as the group lifted production to only 210,000 b/d in January 2022 vs a planned increase of 400,000 b/d. This equates to a shortfall compared to the target of 674,000 b/d. Noteworthy increases came from Saudi Arabia (+100,000 b/d), Nigeria (+50,000 b/d), and the UAE and Kuwait (+40,000 b/d each). These production gains were partially offset by decreased output by Iraq (-30,000 b/d) and Libya (-40,000 b/d).

Refinery margin rallied due to winter demand

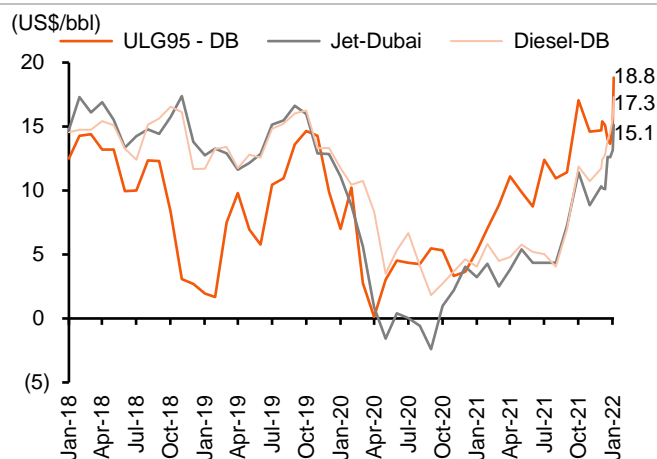
- **Winter demand led to GRM rally.** Refined product crack spreads have rallied with Diesel-Dubai is now at US\$17 per barrel, Jet-Dubai at US\$15/bbl, and Gasoline-Dubai at US\$18.8/bbl, which is higher than the 5-year pre-COVID average (2015-19) of US\$13/bbl for all the products. The strong margins are also supporting by Europe's refinery cut run due to high electricity costs pressure and concerns of the ongoing Russia-Ukraine tensions, which will lead to lower crude supply into the region. Note that European refining capacity accounts for around 16% of the global supply.
- **Supply pressure ahead.** We see potential downside risk on refinery margins once the short-term tailwinds fade, given there will be 1.2m b/d of new capacity expected to start in 1H22, this is more than double the net capacity addition of 0.3m b/d in 2021 and 0.4m b/d in 2020.
- **Saudi Arabia lift OSP premium in Mar 22.** The March official selling price (OSP) for Arab Light crude has increased by about 60 cents per barrel from the previous month to US\$2.8 per bbl, which would mark a rebound after a US\$1.10 a barrel cut in February. This implies crude premium cost increased by US\$0.9 per barrel in 1Q22. This is higher than the YTD average increase for Singapore complex GRM of 25 cents per barrel. However, if we assume that the strong product spreads stay at the current level for the remainder of 1Q22, we estimate that GRM to increase by US\$1.6 per barrel QoQ, which will outpace the crude premium increase.

Ex 4: Crude premium



Sources: Bloomberg

Ex 5: Refined product crack spreads



Sources: TOP

Ex 6: Prices And Spreads

(US\$/bbl)	1Q21	2Q21	3Q21	4Q21	QTD	Nov-21	Dec-21	Jan-22	MTD	Last
Oil prices										
Dated Brent	60.84	68.63	72.94	78.40	86.68	80.75	74.27	85.49	92.66	95.43
Dubai	59.70	66.43	71.31	76.02	84.02	79.78	72.69	83.05	88.84	91.85
WTI	58.07	66.10	70.52	76.08	84.11	78.65	71.69	82.98	89.76	92.31
Crack spreads over Dubai										
Gasoline	7.49	10.67	12.41	15.59	15.07	16.31	14.49	14.79	16.51	14.41
Jet fuel	4.25	5.36	5.80	11.02	12.34	9.17	10.37	12.36	12.25	12.30
Diesel	5.37	6.09	7.48	10.12	12.44	8.89	10.71	12.10	14.11	13.09
High-sulfur fuel oil	(4.28)	(6.80)	(5.42)	(5.83)	(7.42)	(8.88)	(6.45)	(7.23)	(8.38)	(9.72)
Refining margins										
FCC / Dubai	1.21	0.95	0.85	5.81	5.92	4.21	5.78	5.93	5.87	5.53
Hydrocracking / Dubai	0.71	0.77	1.11	6.11	6.82	4.50	6.19	6.79	6.98	6.48
FCC / Espo	1.47	1.55	1.24	6.20	6.32	4.60	6.18	6.33	6.27	5.93
FCC / Arab Light	0.56	(0.51)	(0.64)	4.32	4.43	2.72	4.30	4.45	4.38	4.04
Hydrocracking / Murban	2.29	2.81	3.41	8.41	9.12	6.80	8.49	9.08	9.28	8.77
(US\$/tonne)										
Aromatics spreads										
PX-naphtha	185	232	229	127	175	112	119	175	175	192
BZ-naphtha	191	367	350	231	239	193	223	239	239	222
Olefin spreads										
HDPE-naphtha	583	576	462	505	431	510	536	431	431	432
LDPE-naphtha	959	936	821	920	771	962	918	771	771	752
PP-naphtha	771	709	557	562	459	565	538	459	459	472
Ethylene-naphtha	416	406	304	321	156	307	319	156	156	172
Propylene-naphtha	461	436	294	242	240	228	254	240	240	237
Henry Hub Gas (US\$/mmbtu)	2.73	2.97	4.32	3.72	4.37	5.12	3.86	4.26	4.93	4.57
Coal (Newcastle) (US\$/tonne)	87.47	106.49	165.89	169.60	211.16	153.53	164.42	209.07	221.63	227.30

Source: Bloomberg

Ex 7: Valuation

	Rating	Current price	Target price	Upside/Downside	Market cap	Norm EPS growth	— Norm PE —	EV/EBITDA	— Yield —				
		(Bt)	(Bt)	(%)	(US\$ m)	2021F	2022F	2021F	2022F	2021F	2022F	2021F	2022F
						(%)	(%)	(x)	(x)	(x)	(x)	(%)	(%)
BANPU	BUY	10.90	22.00	101.8	2,235	na	(0.3)	4.6	4.7	4.1	3.7	7.0	7.3
BCP	BUY	29.50	32.00	8.5	1,231	na	169.0	24.1	9.0	6.5	6.7	6.8	6.8
ESSO	HOLD	7.85	8.00	1.9	823	na	na	na	11.4	18.7	8.7	0.0	0.0
IRPC	BUY	3.92	4.40	12.2	2,428	na	9.7	16.1	14.7	7.7	8.9	2.6	3.4
IVL	BUY	48.00	60.00	25.0	8,167	260.7	22.9	11.6	9.5	7.7	6.9	5.1	5.3
PTG	BUY	14.70	22.00	49.7	744	(3.6)	11.8	13.7	12.3	6.8	6.4	3.6	4.1
PTT	BUY	39.75	46.00	15.7	34,408	206.6	(13.2)	9.7	11.2	4.1	4.3	5.0	5.0
PTTEP	BUY	130.50	152.00	16.5	15,700	105.6	32.0	11.8	8.9	3.5	2.8	3.8	4.6
PTTGC	HOLD	57.50	56.00	(2.6)	7,857	286.2	(20.5)	8.8	11.1	8.7	8.7	7.0	4.5
SPRC	SELL	10.20	8.40	(17.6)	1,340	na	na	na	14.0	17.1	7.5	4.8	2.8
SUSCO	BUY	3.96	4.80	21.2	132	3.0	23.4	18.5	15.0	7.5	6.1	2.8	3.3
TOP	SELL	53.75	46.00	(14.4)	3,323	na	65.3	28.5	17.2	15.8	17.2	4.1	2.3

Sources: Company data, Thanachart estimates

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