

Energy Sector – Overweight

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News Update

A positive momentum for sector

- **US crude inventory turned into a build**
- **OPEC+ output edged lower again in October**
- **EIA cut US oil output forecast**
- **China diesel export not enough to cover shortage**

Brent crude oil price rebound end of the week after correction from bearish US inventory data. This is following news on China cutting quarantine time and easing US inflation data. Outlook for crude oil remains positive with OPEC+ plan to massively cut output in November and with limited supply growth from US producers. We see this to provide positive momentum for sector and our preferred picks are refiners (ESSO, TOP, SPRC, and BCP). Global market is also facing issue with diesel shortage despite strong surged in Chinese export.

US crude inventory turned into a build

- US commercial crude oil inventory turned into a build of 3.9m bbls w-w against 1.4m bbls build expected by the market and 3.1m bbls draw last week.
- Gasoline inventories show another draw. Distillate inventory turned into a draw of 0.5m bbls. However, the draw in both products are below market expectation.
- US crude oil production was rose 200k b/d w-w to 12.1k bd

OPEC+ output edged lower again in October

- **Middle East producers led the lower output in Oct.** Argus' survey finds the Opec+ members produced a combined 38.47mb/d, down by 50,000 b/d from September. Lower production from Saudi Arabia, the UAE and Kuwait and a fall in supplies from most west African member countries more than offset a recovery in output from Nigeria after five consecutive months of declines, and higher production from Iraq.
- **Still a big gap between target output quotas.** Opec+ producers had agreed to make a 100,000 b/d cut to their quota output in October. But many member countries were already falling short of their respective targets owing to a lack of investment, sanctions and ageing oil fields. October output was 3.5 mb/d short of the alliance's target, roughly the same level as August-September. Russia's and Nigeria's aggregate shortfall for the month surpassed 2.1 mb/d, accounting for 60% of the group's underperformance
- **A bigger output cut ahead in Nov.** The output drop will see a sharper fall for November as Opec+ plan to cut quotas by 2mb/d. Note that that actual cuts are likely to be around 1 mb/d.

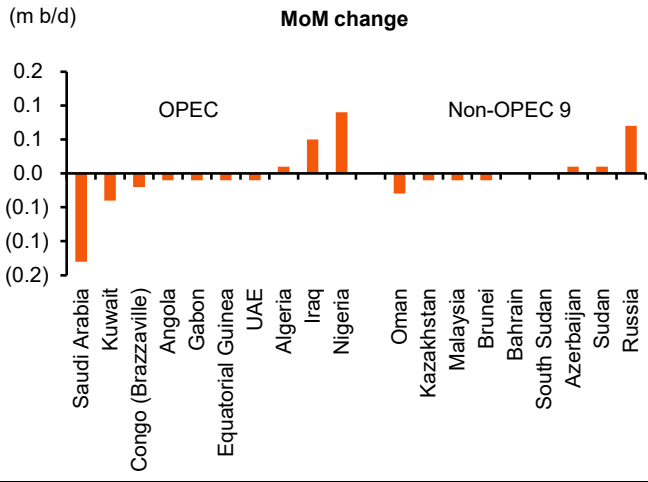
Ex 1: US Weekly data

(m bbls)	Weekly change	Consensus	Last week
Crude Oil	3.925	1.360	-3.115
Gasoline	-0.899	-1.080	-1.257
Distillates	-0.521	-0.800	0.427

(kbpd)	Weekly change	% Change	Current number
Production	+200.0	+1.7%	12,100
Refinery Runs	+247	+1.6%	16,089

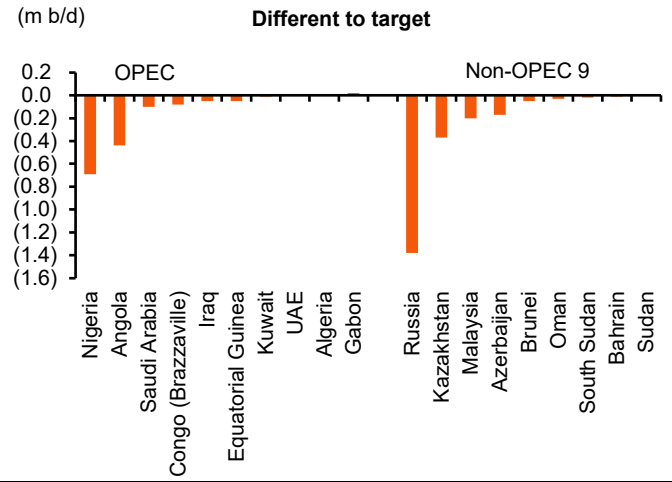
Source: EIA

Ex 2: OPEC + Output M-M Change In October



Sources: Argus

Ex 3: OPEC + Output Comparing To October Target

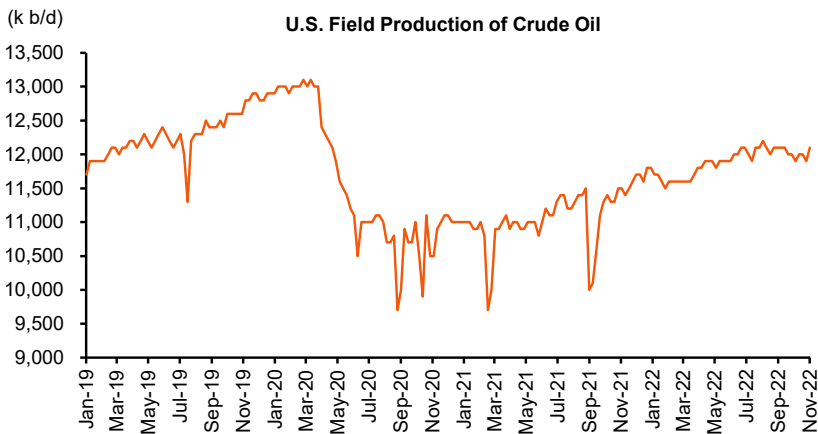


Sources: Argus

EIA cut US oil output forecast

- **EIA slashed US oil output growth by 21%** for next year's. U.S. crude production is expected to increase by about 480,000 b/d to 12.3m b/d in 2023, down from a prior 610,000 b/d growth forecast. In 2022, the US oil output only increased by 784k b/d YTD from 2021 to 11.9m b/d and it's still 3% below 2019 level.
- **Structural issues are behind the lower growth.** The weaker growth is due to ageing wells, shortage of labor and materials, rising costs and a sharp focus on shareholder returns. The limited US oil output put another upward pressure on oil market.

Ex 4: US Oil Output Still Below 2019 Level Despite Strong Oil Price



Sources: EIA

China diesel export not enough to cover shortage

- **China's diesel exports accelerated significantly in September** after being severely restricted over the previous 13 months. Exports were boosted to 1.73 million tonnes (430,000 b/d) in September up from an average of 460,000 mt (114,000 b/d) between August 2021 and August 2022. Note that Volumes recovered to equal the average of 1.72 mt per month between 2018 and the first half of 2021, before the government began restricting them.
- **Diesel cracks remain stubbornly high.** Diesel crack spread maintain at US\$41/bbl this week against US\$34/bbl in 3Q22. This proved the fact that diesel is scarce worldwide. Refinery capacity has fallen in the past few years as several unprofitable refineries were closed. But the primary reason is the cutoff of Russian imports that caused more diesel import demand from Europe. With China expect to ease Zero-Covid policy, the export pressure should also be less and tighten diesel market further.

Ex 5: Prices And Spreads

(US\$/bbl)	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	Sep-22	Oct-22	MTD	Last week	This week
Upstream											
Dubai	71	77	97	108	99	91	91	90	95	95	92
Brent	73	79	98	112	98	94	91	94	96	99	96
Henry hub (US\$/mmbtu)	3.6	4.2	4.8	7.7	8.1	6.4	8.1	6.5	6.2	6.4	5.9
NEX coal price (US\$/t)	165	185	266	364	416	379	439	393	342	350	327
Crack spreads over Dubai											
Gasoline	11.6	15.5	17.8	35.0	13.2	6.3	6.9	3.8	8.8	7.7	11.3
Jet fuel	5.3	10.2	16.2	39.2	32.4	31.7	29.9	32.2	31.3	31.7	37.8
Diesel	5.4	11.4	19.6	43.1	35.2	41.7	33.9	42.6	40.7	41.5	41.9
High-sulfur fuel oil	1.6	3.2	(2.1)	(13.1)	(22.2)	(17.0)	(24.7)	(29.0)	(23.8)	(24.5)	(21.7)
Singapore complex GRM	4.0	6.4	8.4	22.0	6.9	4.6	3.5	3.4	5.4	5.1	8.2
(US\$/tonne)											
Aromatics spreads											
PX-naphtha	240	134	192	364	367	346	393	352	317	352	317
BZ-naphtha	317	196	196	353	263	216	244	191	93	191	100
Olefin spreads											
HDPE-naphtha	462	509	413	444	370	358	361	364	327	364	327
LDPE-naphtha	740	890	731	781	607	516	546	514	447	514	447
PP-naphtha	548	558	419	431	352	333	383	304	267	304	267
Others											
Integrated PET	185	345	297	302	303	195	276	229	195	229	174
ABS-naphtha	1,712	1,565	1,108	1,088	888	798	851	812	727	812	727
Phenol-BZ	255	333	421	193	233	303	320	361	354	361	347
BPA -Phenol	2,074	1,198	843	625	369	387	415	412	355	412	355

Sources: TOP, Bloomberg

Ex 6: Valuation

	Rating	Current	Target	Upside/	Market	Norm EPS grw		Norm PE		EV/EBITDA		— P/BV —		— Yield —		— ROE —	
		price	price	(Downside)	cap	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F	22F	23F
		(Bt)	(Bt)	(%)	(US\$ m)	(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)
BCP	BUY	32.75	39.00	19.1	1,255	116.4	(34.9)	4.5	7.0	3.1	4.7	0.7	0.7	5.5	3.7	17.5	10.5
ESSO	BUY	13.40	18.00	34.3	1,291	na	(31.1)	4.4	6.3	3.3	4.9	1.4	1.4	16.4	5.7	41.0	22.2
IRPC	BUY	3.08	4.40	42.9	1,752	(70.7)	489.1	54.9	9.3	12.1	7.0	0.7	0.7	4.9	5.4	1.3	7.3
IVL	HOLD	43.00	46.00	7.0	6,720	93.0	(26.6)	6.1	8.3	5.5	6.2	1.2	1.1	4.7	3.5	22.4	14.3
OR	SELL	24.60	20.00	(18.7)	8,216	27.8	(14.0)	21.0	24.4	11.3	12.4	2.7	2.5	1.4	1.2	13.4	10.5
PTT	BUY	34.75	42.00	20.9	27,626	(5.0)	4.4	11.8	11.3	4.5	4.2	0.9	0.9	5.8	5.8	8.2	8.3
PTTEP	HOLD	189.00	159.00	(15.9)	20,884	77.0	(15.4)	9.6	11.4	3.4	3.8	1.6	1.5	3.2	3.7	17.5	13.4
PTTGC	BUY	47.75	56.00	17.3	5,992	7.4	(21.9)	7.1	9.1	7.6	7.6	0.7	0.6	5.2	4.6	9.5	7.3
SCC	SELL	344.00	300.00	(12.8)	11,490	(37.1)	(2.0)	14.0	14.3	13.3	11.4	1.1	1.1	3.6	3.5	8.0	7.5
SPRC	BUY	12.20	15.50	27.0	1,472	na	(39.5)	4.7	7.7	2.8	4.2	1.2	1.1	9.8	3.8	28.5	15.0
TOP	BUY	55.25	70.00	26.7	3,435	450.0	(54.1)	3.7	8.2	5.3	10.0	0.8	0.7	5.4	4.2	22.0	9.0

Sources: Company data, Thanachart estimates

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