Energy Sector – Neutral

News Update

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An eventful week that led nowhere

- **Greater-than-expected inventory build**
- **OPEC+ staying the course despite pressure for more oil**
- **Refinery run rates picking up**
- **En Plus: Coal's future remains intact despite COP26**

Strong job reports rescued an otherwise poor week for oil price.

Greater-than-expected inventory build

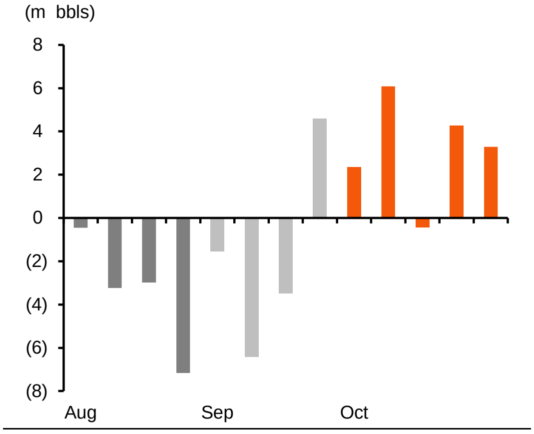
- US commercial crude oil inventory grew by more-than-expected at 3.3m bbls. Meanwhile, gasoline inventories decreased by 1.5m bbls whereas distillate stockpiles grew by 2.2m bbls.
- US crude oil production grew by 200kbd w-w to 11.5mbd.
- US petroleum products supplied was broadly flat w-w at 20.0mbd.
- Baker Hughes reported that US oil rig count jumped by 6 rigs to 450 rigs as of 5 November.

OPEC+ staying the course despite pressure for more oil

OPEC+ will raise its output by 400kbd in December as initially planned despite pressure from major consuming countries for more oil.

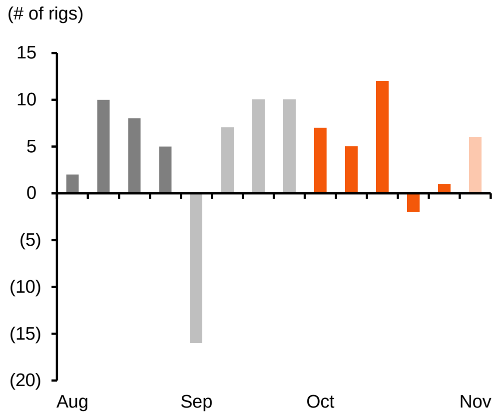
- **Staying the course**: OPEC+ members have agreed to ramp up its production by 400kbd in December as initially planned. In total, the group will pump just over 40mbd: 24.3mbd by the 10 OPEC members and 15.8mbd its non-OPEC allies.
- **Technical issue faced by Nigeria, Angola**: The meeting did not address on-going technical issues faced by several members in Africa, notably Nigeria and Angola. If these issues are not resolved, actual production could fall below the target. Still, other members, including Saudi Arabia and the UAE, have significant spare capacity that could be ramped up to fill in the gap.
- **Smaller deficit expected in 4Q21F**: We believe the reason OPEC+ continues to maintain its pace of a gradual output increase is the forecast of a smaller deficit in 4Q21. Late last month, the group's joint technical committee (JTC) revised down its forecast of oil market deficit to just 300kbd compared to 1.1mbd previously.
- **Biden's plea**: President Joe Biden, whose popularity is waning at home due to inflation, has made pleas to OPEC+ members to ramp up production more quickly. Still, the President lacks specific power to force OPEC+ to do his bidding, and his call went unanswered.

Ex 1: U.S. crude oil inventory w-w change



Source: EIA

Ex 2: U.S. oil rig count w-w change



Source: Baker Hughes

Ex 3: OPEC+ output plan for Dec 2021 (kbd)

OPEC 10	Output	Non-OPEC	Output
Algeria	962	Azerbaijan	654
Angola	1,392	Bahrain	187
Congo	296	Brunei	93
Eq.Guinea	116	Kazakhstan	1,556
Gabon	170	Malaysia	542
Iraq	4,237	Mexico	1,753
Kuwait	2,558	Oman	804
Nigeria	1,666	Russia	10,018
Saudi Arabia	10,018	Sudan	69
UAE	2,885	South Sudan	118
Total OPEC 10	**24,300**	**Total Non-OPEC**	**15,794**
Total OPEC+	**40,094**		

Source: OPEC

Refinery run rates picking up

Refineries across Asia Pacific are increasing their run rates in response to improved demand and better margins.

- **India**: India's largest state-run refinery Indian Oil Corp lifted its utilization rates to an average of 90% in October, up from 82% in September and 83% in August. Privately owned refineries also increased their utilization rates to 95% in October, up from 89% in the previous month.
- **South Korea**: S-Oil, South Korea's biggest refiner, raised its crude run rate at Onsan refinery to 99% in the third quarter which was higher than pre-pandemic level. SK Innovation, the country's top refiner, also lifted its crude run rate to 68% in 3Q21 vs 66%/63% in 2Q/1Q21, respectively.
- **Elsewhere**: In Vietnam, Binh Son Refining & Petrochemical is raising its run rate to 100% since early October from 85% previously in response to better demand outlook. Refineries in Pakistan are also raising their run rates though no figure was provided. This is in response to heightened fuel oil demand from gas-to-oil switching.

En Plus: Coal's future remains intact despite COP26

There was little to no progress on global coal phase out at COP26 as major consumers refused to sign up to the pledge and those already pledging to phase out coal failed to agree on specific measures.

- **Coal phase out is no new news**: 40 countries, including Germany, Italy, South Korea, and even Indonesia, have signed pledges to phase out coal. However, many of these countries have already announced coal phaseout prior to COP26 summit. For instance, since 2017 Italy has pledged to phase out coal by 2025. Similarly, Germany has already announced plans to phase out coal by 2030.
- **Notable absentees**: Major consuming countries such as China, India, Australia and the US have not signed up to the pledge to phase out coal. This renders the agreement somewhat less meaningful given that China and India alone consume 3/5 of coal globally. On the other hand, the signatory countries make up just 11% of coal-generated electricity globally.
- **Climate Investment Fund (CIF)**: A handful of developing countries that rely heavily on coal, including Indonesia and South Africa will join a pilot program aimed at accelerating their transition from coal. As part of CIF, these countries are set to receive multi-billion dollar funding from developed countries as well as six multilateral development banks.

Ex 4: Prices And Spreads

(US$/bbl)	4Q20	1Q21	2Q21	3Q21	QTD	Aug-21	Sep-21	Oct-21	MTD	Last
Oil prices										
Dated Brent	44.53	60.84	68.63	72.94	83.49	70.02	74.72	83.65	82.81	82.50
Dubai	43.87	59.70	66.43	71.31	81.22	68.91	72.36	81.22	81.23	78.85
WTI	42.74	58.07	66.10	70.52	81.33	67.71	71.54	81.22	81.78	81.27
Crack spreads over Dubai										
Gasoline	5.20	7.49	10.67	12.41	16.13	12.72	12.79	16.28	15.48	17.23
Jet fuel	3.79	4.25	5.36	5.80	10.71	5.16	7.82	10.71	10.69	13.12
Diesel	4.53	5.37	6.09	7.48	11.32	7.21	8.71	11.55	10.33	10.81
High-sulfur fuel oil	(1.02)	(4.28)	(6.80)	(5.42)	(5.81)	(5.62)	(2.49)	(5.14)	(8.66)	(8.56)
Refining margins										
FCC / Dubai	1.07	1.21	0.95	0.85	4.49	0.83	1.15	4.44	0.00	5.27
Hydrocracking / Dubai	0.52	0.71	0.77	1.11	5.15	0.92	1.69	5.19	4.99	5.76
FCC / Espo	(0.33)	1.47	1.55	1.24	4.88	1.22	1.54	4.83	5.09	5.67
FCC / Arab Light	1.45	0.56	(0.51)	(0.64)	3.00	(0.66)	(0.34)	2.95	3.21	3.79
Hydrocracking / Murban	1.17	2.29	2.81	3.41	7.45	3.22	3.98	7.48	7.29	8.05
(US$/tonne)										
Aromatics spreads										
PX-naphtha	136	185	232	229	143	256	200	143	143	125
BZ-naphtha	119	191	367	350	260	333	341	260	260	225
Olefin spreads										
HDPE-naphtha	608	583	576	462	490	499	462	490	490	525
LDPE-naphtha	780	959	936	821	914	864	862	914	914	955
PP-naphtha	695	771	709	557	604	594	527	604	604	605
Ethylene-naphtha	463	416	406	304	350	279	355	350	350	365
Propylene-naphtha	499	461	436	294	252	323	281	252	252	240
Henry Hub Gas (US$/mmbtu)	2.76	2.73	2.97	4.32	5.56	4.03	5.11	5.57	5.53	5.52
Coal (Newcastle) (US$/tonne)	66.20	87.47	106.49	165.89	219.13	167.19	184.41	235.44	150.61	155.40

Source: Bloomberg

Ex 5: Valuation

	Rating	Current price (Bt)	Target price (Bt)	*Upside/ (Downside) (%)*	Market cap (US$ m)	Norm EPS growth 2021F (%)	Norm EPS growth 2022F (%)	Norm PE 2021F (x)	Norm PE 2022F (x)	EV/EBITDA 2021F (x)	EV/EBITDA 2022F (x)	Yield 2021F (%)	Yield 2022F (%)
BANPU	BUY	10.60	20.00	*88.7*	2,152	na	21.5	6.7	5.5	5.2	4.7	5.6	7.3
BCP	SELL	26.25	21.00	*(20.0)*	1,085	na	na	na	24.1	8.7	6.8	0.0	2.3
ESSO	SELL	7.75	6.90	*(11.0)*	805	na	na	na	142.0	36.8	20.8	0.0	0.4
IRPC	BUY	4.12	5.10	*23.8*	2,527	na	9.6	14.7	13.4	9.1	8.4	4.1	4.5
IVL	BUY	41.75	52.00	*24.6*	7,035	169.1	(0.9)	13.5	13.7	8.2	8.9	2.6	2.6
PTG	BUY	14.60	22.00	*50.7*	732	(3.6)	11.8	13.6	12.2	6.8	6.4	3.7	4.1
PTT	BUY	37.25	50.00	*34.2*	31,932	182.0	5.2	9.9	9.4	4.5	4.1	5.0	5.3
PTTEP	BUY	117.50	140.00	*19.1*	14,000	68.1	15.8	13.0	11.2	4.1	3.7	4.6	5.4
PTTGC	BUY	61.00	86.00	*41.0*	8,254	219.4	(1.2)	11.3	11.4	6.8	6.7	5.3	5.3
SPRC	SELL	9.90	7.20	*(27.3)*	1,288	na	na	na	128.5	23.2	17.1	0.0	0.3
SUSCO	BUY	3.30	4.80	*45.5*	109	3.0	23.4	15.5	12.5	6.5	5.3	3.3	4.0
TOP	HOLD	53.25	57.00	*7.0*	3,260	na	(11.7)	20.3	22.9	15.6	17.0	2.2	2.0

Sources: Company data, Thanachart estimates

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