Energy Sector – Neutral

News Update

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"At all costs"

- **An unexpected inventory build**
- **China to secure fuel supplies "at all costs"**
- **Highlights from OPEC's World Oil Outlook 2021**
- **En Plus: Things are looking up in the tanker market**

By far the biggest news in recent days was the Chinese government's order to the country's top energy companies to secure fuel supplies for winter "at all costs". The news drove coal and gas prices to fresh record highs while Brent oil price approached $80/bbl. For this week, all eyes will be on OPEC+ meeting. Market expects another 400kbd production increase for November.

An unexpected inventory build

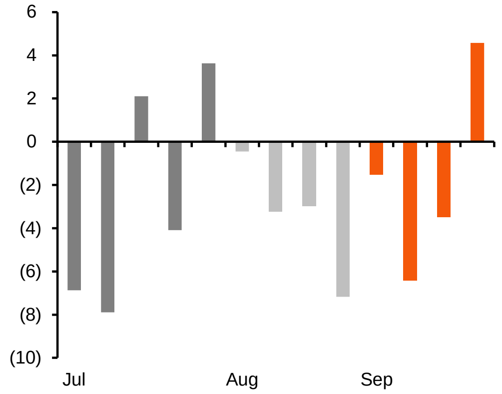
- For the week ending 24 September 2021, US commercial crude oil inventory unexpectedly increased by nearly 4.6m bbls against consensus expectation of a 1.6m bbls draw. Product inventories also increased w-w with gasoline inventories up by 0.2m bbls and distillate inventories up by 0.4m bbls.
- US crude oil production continued to rebound post Hurricane Ida. Output grew 500kbd w-w to 11.1mbd.
- US petroleum products supplied declined 754kbd to 20.4mbd. Leading the decline were distillate fuels and "other oils."
- Baker Hughes reported that US oil rig count increased by 7 rigs w-w to 428 rigs as of 1 October.

China to secure fuel supplies "at all costs"

The Chinese government ordered its energy firms to step up efforts to secure fuel supplies for the coming winter.

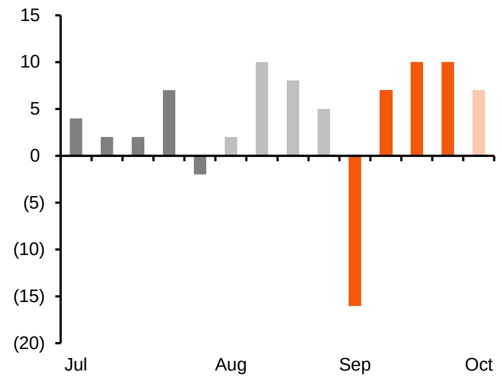
- **"At all costs"**: According to Bloomberg, the order came directly from Vice Premier Han Zheng after an emergency meeting with state-owned assets regulator and economic planning agency. This follows a severe power crunch as two thirds of the provinces grapple with rolling blackouts.
- **Market reaction**: Reactions to the news were dramatic and immediate as coal and gas prices both touched fresh record highs. Newcastle coal futures, the main benchmark for Asia Pacific coal trade, shot up to well over $220/ton as of Friday's close. Asian spot LNG price also touched an all-time high of over $34/mmbtu. Brent oil price reached $80/bbl before pulling back slightly even though oil is not typically used in heating or electricity generation.
- **Our view**: With demand picking up seasonally and supplies remaining tight, we believe coal and gas prices will remain elevated, if not increase further, in the months ahead.

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: Global energy supply grth. 2020-45F

Fuel	Growth (% p.a.)	Share of total (%) 2020	2045F
Oil	0.7	30.0	28.1
Coal	-0.7	26.5	17.4
Gas	1.2	23.3	24.4
Nuclear	1.7	5.2	6.2
Hydro	1.4	2.7	3.0
Biomass	1.2	9.9	10.5
Other renew.	7.0	2.5	10.4
Total	**1.0**	**100.0**	**100.0**

Source: OPEC WOO 2021

Note: Other renewables include solar, wind and geothermal energy

Highlights from OPEC's World Oil Outlook 2021

OPEC released its annual World Oil Outlook publication last week. Below are some of the key highlights from the report.

- **Energy demand growth**: OPEC forecasts total energy demand to grow 28% cumulative (1% p.a.) from 2020 to 2045F. This will be driven solely by growing demand in developing countries whereas demand in developed economics is expected to stay flat over the forecast period.
- **Oil still reigns**: OPEC believes oil will remain the largest source of energy, accounting for 31% of total energy needs by 2025F before declining to 28% in 2045F.
- **Renewables to see fastest growths**: OPEC expects growth in "other renewables" (solar, wind and geothermal energy) of 7% p.a. in 2020-45F, by far the fastest among all energy sources. This category will account for 10% of total energy needs by 2045F compared to just 2.5% in 2020.
- **Coal vs natural gas**: Coal demand is expected to peak in 2025F and gradually decline thereafter though the pace of decline is very slow. Cumulative growth rate in 2020-45F is expected to be -0.7% p.a. Natural gas, on the other hand, is expected to provide nearly 30% of additional energy supply over the next 25 years with implied growth rate of 1.2% p.a.

En Plus: Things are looking up in the tanker market

Global oil tanker market is slowly recovering with spot rates approaching or exceeding year highs across all major routes.

- **Rates nearing or at YTD highs**: The benchmark Arab Gulf - China (TD3) rate is nearing YTD high at WS41 vs almost WS43 at the very beginning of the year. Shipping rate from West Africa to China (TD15) is notching WS43, surprising YTD's previous highs of close to WS42. Rates from Arab Gulf to US Gulf Coast (TD1) is at close to WS21, nearing YTD high of almost WS22 at the start of January.
- **A long way to go**: While rates have been firming up across the board, they remain at depressed levels with daily earnings still below cash opex for most ship owners. Shipping volume also remains well below pre-COVID level. For example, W. Africa – China route is seeing just 29m bbls of crude flow this month compared to nearly 40m bbls per month in 2019 according to Vortexa.

Ex 4: Prices And Spreads

(US$/bbl)	4Q20	1Q21	2Q21	3Q21	QTD	Jul-21	Aug-21	Sep-21	MTD	Last
Oil prices										
Dated Brent	44.53	60.84	68.63	72.94	79.55	74.22	70.02	74.72	79.55	79.55
Dubai	43.87	59.70	66.43	71.31	75.68	72.79	68.91	72.36	75.68	75.68
WTI	42.74	58.07	66.10	70.52	75.88	72.43	67.71	71.54	75.88	75.88
Crack spreads over Dubai										
Gasoline	5.20	7.49	10.67	12.41	13.12	11.71	12.72	12.79	13.12	13.12
Jet fuel	3.79	4.25	5.36	5.80	10.95	4.44	5.16	7.82	10.95	10.95
Diesel	4.53	5.37	6.09	7.48	10.43	6.54	7.21	8.71	10.43	10.43
High-sulfur fuel oil	(1.02)	(4.28)	(6.80)	(5.42)	(3.09)	(8.13)	(5.62)	(2.49)	(3.09)	(3.09)
Refining margins										
FCC / Dubai	1.07	1.21	0.95	0.85	2.54	0.56	0.83	1.15	2.54	2.54
Hydrocracking / Dubai	0.52	0.71	0.77	1.11	3.36	0.74	0.92	1.69	3.36	3.36
FCC / Espo	(0.33)	1.47	1.55	1.24	2.93	0.96	1.22	1.54	2.93	2.93
FCC / Arab Light	1.45	0.56	(0.51)	(0.64)	1.05	(0.93)	(0.66)	(0.34)	1.05	1.05
Hydrocracking / Murban	1.17	2.29	2.81	3.41	5.66	3.03	3.22	3.98	5.66	5.66
(US$/tonne)										
Aromatics spreads										
PX-naphtha	136	185	232	229	229	230	256	200	200	186
BZ-naphtha	119	191	367	350	350	372	333	341	341	286
Olefin spreads										
HDPE-naphtha	608	583	576	462	462	432	499	462	462	446
LDPE-naphtha	780	959	936	821	821	754	864	862	862	836
PP-naphtha	695	771	709	557	557	552	594	527	527	526
Ethylene-naphtha	463	416	406	304	304	284	279	355	355	371
Propylene-naphtha	499	461	436	294	294	281	323	281	281	256
Henry Hub Gas (US$/mmbtu)	2.76	2.73	2.97	4.32	5.62	3.82	4.03	5.11	5.62	5.62
Coal (Newcastle) (US$/tonne)	66.20	87.47	106.49	165.89	228.00	146.01	167.19	184.41	228.00	228.00

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	13.00	20.00	*53.8*	1,962	na	21.5	8.2	6.7	5.6	5.1	4.6	5.9
BCP	SELL	27.50	21.00	*(23.6)*	1,126	na	na	na	25.2	9.0	7.0	0.0	2.2
ESSO	SELL	8.25	6.90	*(16.4)*	849	na	na	na	151.2	37.9	21.5	0.0	0.3
IRPC	BUY	4.20	5.10	*21.4*	2,552	na	9.6	15.0	13.7	9.2	8.5	4.0	4.4
IVL	BUY	44.00	52.00	*18.2*	7,345	169.1	(0.9)	14.3	14.4	8.5	9.1	2.5	2.4
PTG	BUY	16.20	22.00	*35.8*	804	(3.6)	11.8	15.1	13.5	7.2	6.8	3.3	3.7
PTT	BUY	38.75	50.00	*29.0*	32,910	182.0	5.2	10.3	9.8	4.6	4.2	4.8	5.1
PTTEP	BUY	117.50	140.00	*19.1*	13,870	68.1	15.8	13.0	11.2	4.1	3.7	4.6	5.4
PTTGC	BUY	63.50	86.00	*35.4*	8,513	219.4	(1.2)	11.7	11.9	7.1	6.9	5.1	5.0
SPRC	SELL	10.10	7.20	*(28.7)*	1,302	na	na	na	131.1	23.6	17.5	0.0	0.3
SUSCO	BUY	3.18	4.80	*50.9*	104	3.0	23.4	14.9	12.1	6.3	5.1	3.4	4.1
TOP	SELL	53.50	48.00	*(10.3)*	3,245	na	6.1	27.2	25.6	17.7	18.4	1.7	1.8

Sources: Company data, Thanachart estimates

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