Energy Sector – Overweight

News Update

Yupapan Polpornprasert | Email: yupapan.pol@thanachartsec.co.th

Continue supply tightness

- **Bigger than expected US gasoline inventory draw**
- **Gasoline margin catching up with diesel**
- **Aromatic margins over ULG95 turned negative**
- **Opec+ falls short in April Again**

Crude oil price was steady w-w despite US crude inventory showed a big increase. Oil product markets continue to be strong with US reported another inventory draw this week. Gasoline spread over Dubai broke US$30/bbl territory as US driving season approached.

Bigger than expected US gasoline inventory draw

- US commercial crude oil inventory increased by another 8.5m bbls w-w, against -0.457m bbls draw expected by the market and 1.3m bbls build last week. Gasoline inventories decreased by another 3.6m bbls while middle distillate inventories also fell by another 0.9m bbls. Gasoline inventory draw is larger than expected while middle distillate inventory draw is lower than expectation.
- US crude oil production was down 100k bpd w-w to 11.8mbd.

Gasoline margin catching up with diesel

After supply concerns sent diesel prices to a record early in the Ukraine war, now the gasoline market is heating up. Asian gasoline crack spread moved up by US$7.7/bbl w-w to US$35/bbl vs. pre- Covid 5-year average of US$14.6/bbl.

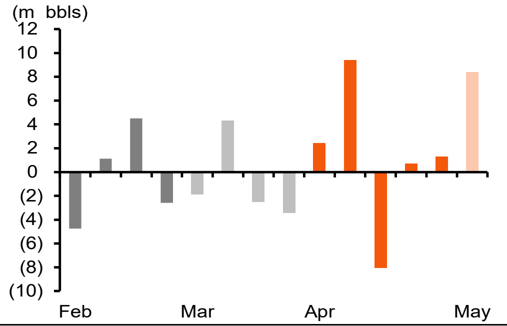
- **Spill over effect from Russian supply disruption.** Gasoline was a less obvious concern early in the war because Russia is only a small exporter. Diesel was a much clearer risk given the country is a major supplier. Before the war, Russia supplied fuel oil and vacuum gasoil (VGO) to refiners in the US and Europe. These secondary feedstocks can be processed into higher value oil products, like gasoline and diesel. But the US has now banned imports of Russian petroleum as well as many European companies. Refiners will have a more difficult time finding alternatives to VGO imports.
- **Entering US driving season**. US, global largest gasoline consumer, is entering its driving season in May-Sep which demand is 4-8% higher than normal season. Couple with lower gasoline production in Europe, it should lead to further gasoline stock draw and drive Asian gasoline crack spread higher in 2Q22F.

Ex 1: US Weekly data

(m bbls)	Weekly change	Consensus	Last week
Crude Oil	+8.487	(0.457)	+1.302
Gasoline	(3.607)	(1.574)	(2.230)
Distillates	(0.913)	(1.312)	(2.344)
(kbpd)	**Weekly change**	**% Change**	**Current number**
Production	(100)	0.0%	11,800
Refinery Runs	+23	+1.5%	15,696

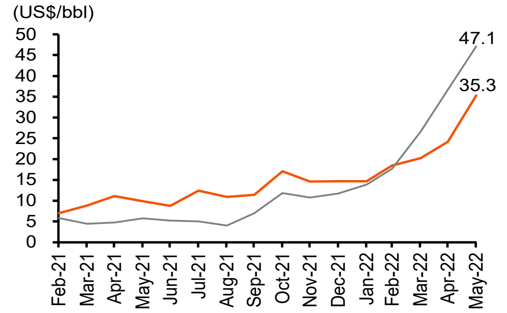
Source: EIA

Ex 2: US Crude Inventory



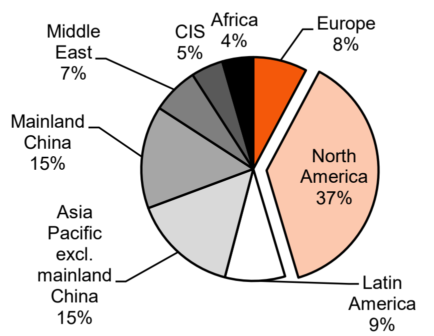
Source: Bloomberg

Ex 3: Gasoline Crack Catching Up



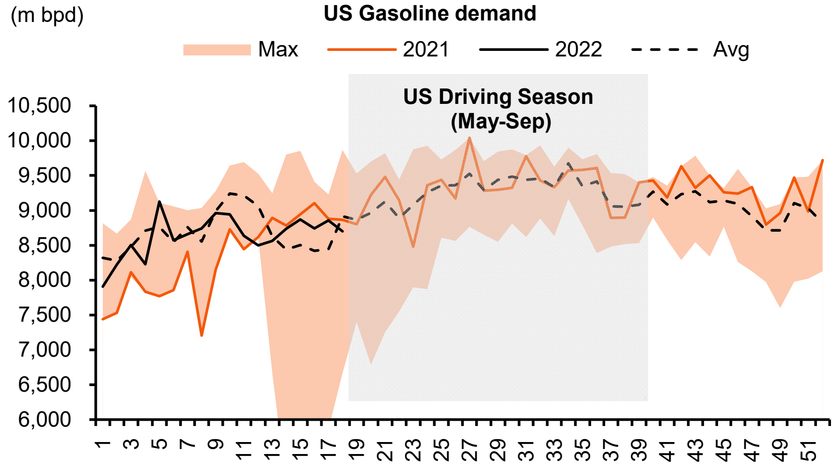
Source: TOP

Ex 4: Gasoline Demand Breakdown



Source: IHS

Ex 5: US Gasoline Demand



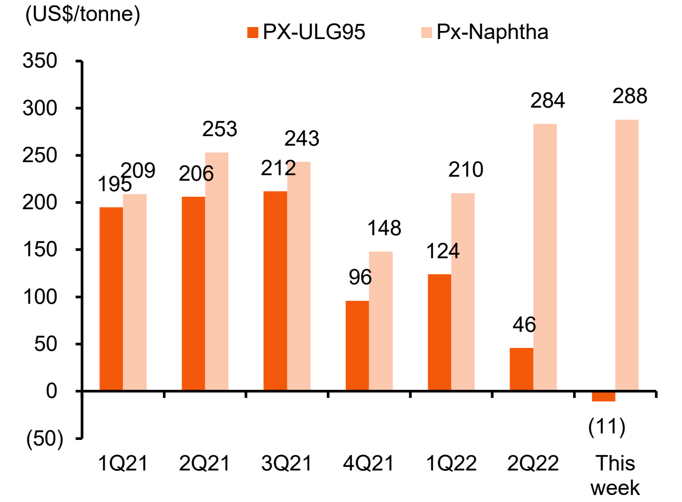
Sources: EIA

Aromatic margins over ULG95 turned negative

With strong gasoline price, aromatic spread over ULG95 has turned negative last week. Px-ULG95 was at -US$11/t while Benzene spreads was at -US38/t.

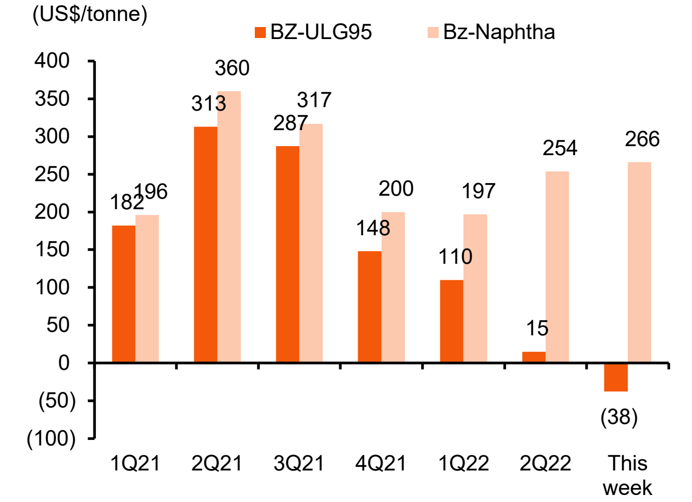
- **Supply pressure continue in 2H22**. According to TOP, new Px supply addition in Asia Pacific and Middle East is expected to be at 2.5mt vs 1H22 of 2.6 and outpacing demand growth of 1.5mt. Similar picture is expected for Benzene market with supply addition of 1.2mt in 2H22 vs 1.3mt in 1H22 and demand growth of 1mt.
- **Naphtha based producers fare better.** Aromatic spreads over naphtha have recovered from 1Q22 due to production cut run and improving demand following easing lockdown. Px-Naphtha spread stands at US$288/t vs Px-ULG95 spread of -US$11/t. Although the spread over naphtha has improved, it remains weak relative to pre-Covid 5-year average of US$385/t.
- **TOP is the most impact**. TOP is the only producer among Thai downstream companies which use gasoline is as a feedstock for aromatic production. The high gasoline price will likely continue to pressure its aromatic margin but will likely help offset by strong refinery margin currently.

Ex 6: Paraxylene Spreads



Sources: TOP, Bloomberg

Ex 7: Benzene Spreads

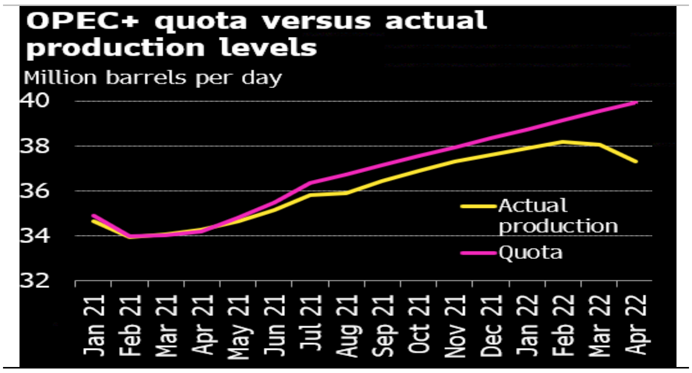


Sources: TOP, Bloomberg

pec+ falls short in April Again

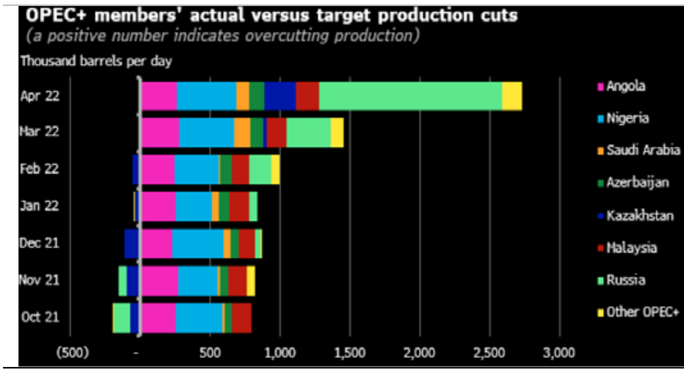
- **Russia led to lower output in April**: Output by the Opec+ group was down for the second consecutive month, dropping by around 500k bpd compared with March to 37.6m b/d in April. Production was nearly 2.4m b/d below the group's combined target of 39.9m b/d for the month. The shortfall increased by 890k b/d comparing to March. The fall in Opec+ output was driven by an 870k b/d decrease in Russian production to 9.13m b/d, a 16-month low.
- **Total OPEC production behind target again**: Total Opec production was only 330k b/d higher owing to renewed disruption in Libya. The top three OPEC producers, Saudi Arabia, Iraq and the UAE, saw the highest increases in their respective oil production last month.
- **Unplanned outages and underinvest are key issue**s. Output in Libya plunged by 161k b/d following the protests starting on 17th April that led state-owned NOC to declare force majeure restrictions at Libya's largest oil field and two export terminals. Kazakhstan's oil output dropped by 150k b/d. It was hit in late March as a storm damaged two of the three mooring systems used to load oil onto tankers in the Russian Black Sea port of Novorossiysk. Additionally, African members Angola and Nigeria have been pumping 300,000 bpd-400,000 bpd below quotas each, for months, due to a lack of investment and capacity.

Ex 8: OPEC + Quota Vs. Actual Production



Source: Bloomberg

Ex 9: OPEC + Quota Vs. Actual Production



Source: Bloomberg

Ex 10: Prices And Spreads

(US$/bbl)	1Q21	2Q21	3Q21	4Q21	1Q22	QTD	Mar	Apr	May	Last
Oil prices										
Dubai	60	66	71	77	97	103	116	101	107	108
Brent	61	69	73	79	98	107	113	106	110	106
Crack spreads over Dubai										
Gasoline	7.0	9.9	11.6	15.5	17.8	29.7	20.2	24.1	35.3	35.3
Jet fuel	3.3	4.5	5.3	10.2	16.2	37.0	22.6	31.6	42.5	42.5
Diesel	(3.4)	(5.8)	(3.3)	(6.9)	(8.3)	12.5	26.6	36.7	47.1	47.1
High-sulfur fuel oil	0.8	(1.0)	1.6	3.2	(2.1)	(8.7)	(7.9)	8.3	7.8	7.8
Singapore complex GRM	**2.1**	**2.3**	**4.0**	**6.4**	**8.4**	**23.2**	**11.1**	**19.8**	**26.5**	**26.5**
(US$/tonne)										
Aromatics spreads										
PX-naphtha	190	241	240	134	192	263	193	257	275	273
BZ-naphtha	190	360	317	196	196	238	149	226	251	254
Olefin spreads										
HDPE-naphtha	577	575	462	509	413	493	377	504	470	458
LDPE-naphtha	962	915	740	890	731	824	707	834	805	788
PP-naphtha	748	694	548	558	419	471	364	484	445	428
Others										
Integrated PET	230	231	185	345	297	306	290	310	302	296
ABS-naphtha	1,811	1,932	1,712	1,565	1,108	1,123	1,002	1,129	1,110	1,078
Phenol-BZ	213	252	255	333	421	271	342	282	259	249
BPA -Phenol	1,565	2,008	2,074	1,198	843	721	736	736	705	705

Sources: TOP, Bloomberg

Ex 11: Valuation

	Rating	Current price (Bt)	Target price (Bt)	*Upside/ (Downside) (%)*	Market cap (US$ m)	Norm EPS growth 2022F (%)	Norm EPS growth 2023F (%)	— Norm PE — 2022F (x)	— Norm PE — 2023F (x)	EV/EBITDA 2022F (x)	EV/EBITDA 2023F (x)	— Yield — 2022F (%)	— Yield — 2023F (%)
BANPU	BUY	11.60	17.00	*46.6*	2,256	132.1	(17.3)	3.7	4.4	3.0	2.9	9.3	7.9
BCP	BUY	34.25	34.00	*(0.7)*	1,356	38.2	(33.6)	7.4	11.2	4.6	7.2	5.3	3.5
ESSO	HOLD	9.15	8.20	*(10.4)*	910	na	320.8	46.8	11.1	9.7	7.2	0.0	0.0
IRPC	BUY	3.10	4.40	*41.9*	1,821	(70.7)	489.1	55.3	9.4	12.1	7.0	4.9	5.3
IVL	BUY	46.50	60.00	*29.0*	7,505	31.7	11.5	9.7	8.7	7.7	7.8	5.2	5.7
PTG	BUY	14.00	19.00	*35.7*	672	50.8	19.5	15.4	12.9	6.9	6.4	3.2	3.9
PTT	BUY	36.25	42.00	*15.9*	29,766	(5.0)	4.4	12.3	11.8	4.6	4.3	5.5	5.5
PTTEP	HOLD	151.50	148.00	*(2.3)*	17,291	42.9	(23.8)	9.6	12.6	3.1	3.6	4.0	4.6
PTTGC	BUY	44.25	58.00	*31.1*	5,736	(19.4)	5.4	8.7	8.3	7.1	6.7	5.6	5.4
SPRC	SELL	11.10	8.50	*(23.4)*	1,384	na	(23.1)	13.1	17.0	5.2	6.2	4.5	2.9
SUSCO	BUY	3.28	5.20	*58.5*	104	35.0	30.1	12.3	9.4	5.2	4.3	4.1	5.3
TOP	SELL	56.00	45.00	*(19.6)*	3,284	53.9	(24.2)	13.3	17.5	13.1	17.7	5.4	2.3

Sources: Company data, Thanachart estimates

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