Energy Sector – Overweight

News Update

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Negative headwinds for refiners

- **US inventories build across all products**
- **GRM rebound on short-term disruption**
- **Chinese refineries plan to ramp up utilization**
- **Freight rate surged on higher China oil demand**

Oil price inched lower again with Brent reached below USD90/bbl on Friday due to recession fear. Refinery margin shows a rebound from negative of USD1.2/bbl last week to +USD2.2/bbl on Friday. However, market remains concern on Chinese export quota for refined oil products.

US inventories build across all products

- US commercial crude oil inventory shows another build of 1.1m bbls w-w against 2.2m bbls build expected by the market, but lower than a build last week of 2.4m bbls draw last week.
- Gasoline inventories show another build of 1.6m bbls w-w while distillate inventories also show a build of 1.2m bbls which surprise market expectation.
- US crude oil production was steady w-w at 12.1k bd

Short-term disruption in refinery market

- **Strong middle distillate margins rebound**. Diesel spread over Dubai has been able to rebound strongly to USD34.5/bbl from USD20.8/bbl last week. Jet spread also recovered to USD26/bbl from USD18/bbl last week.
- **Short-term disruption**. A fire broke out at a refinery operated by BP in Toledo, Ohio. The facility has a capacity of close to 160,000 barrel per day (bpd) of crude oil and is co-owned by BP and Canada's Cenovus. Meanwhile, strike action has reduced output at Exxon Mobil's 240,000 bpd Port Jerome-Gravenchon oil refiner. This followed wage negotiations with Exxon Mobil related to growing inflation in Europe.

Chinese refineries plan to ramp up utilization

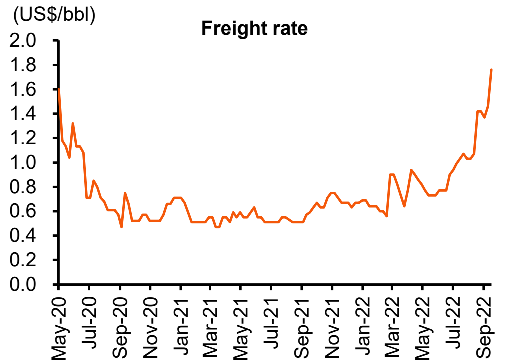
- **Chinese refiners have plans to increase processing rates by 10-15%** in October. China has begun running down its crude oil stockpiles, which could signal that refiners are getting ready to boost fuel exports. Onshore crude inventories stood at 909 million barrels as of September 15, the lowest since May 12, according to Bloomberg. This is in response to an expectation that Chinese government will issue additional export quota of 15mt and potential oil demand recovery from travel demand in 4Q22. This implies 5mt per month for the rest of the year which is much higher than average of 1.95mt per month so far this year.

Ex 1: US Weekly data

(m bbls)	Weekly change	Consensus	Last week
Crude Oil	1.142	2.161	2.442
Gasoline	1.569	-0.431	-1.767
Distillates	1.231	0.420	4.219
(kbpd)	**Weekly change**	**% Change**	**Current number**
Production	0.0	0.0%	12,100
Refinery Runs	+333	+2.0%	16,355

Source: EIA

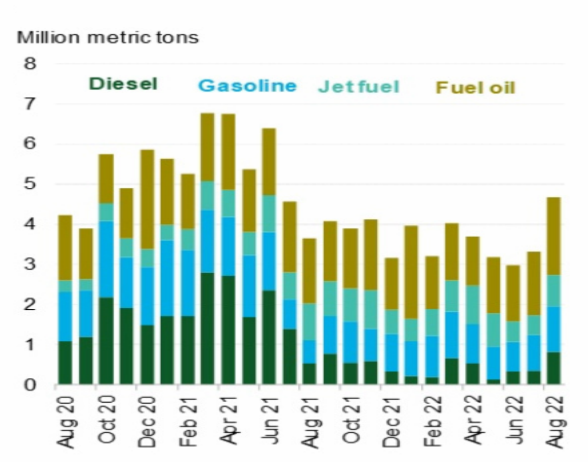
Ex 2: China Demand Boosted Freight Rate



Source: Bloomberg

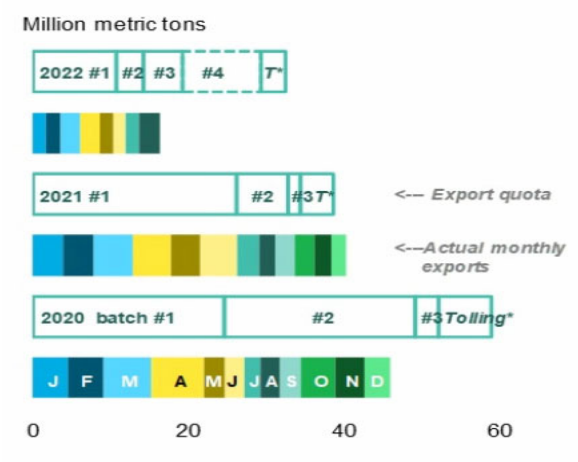
- **August diesel export already inched higher.** Chinese refiner's total product exports in August jumping 59% from July. Notably, August diesel exports more than doubled to 830,000 tons, a year-on-year increase of 54%, but this is still much lower than 2019 average of 1.7mt.
- **Rising freight rate.** The rebound in China's crude demand has boosted the freight rates for Very Large Crude Carriers (VLCC) sailing from the U.S. Gulf and the Middle East to China to their highest since May 2020 at about USD10m on Sept. 14, up USD2.8 million, or 39%, from Aug. 10. In our SG GRM calculation, the freight rate increased to USD1.8/bbl vs YTD average of USD0.8/bbl.
- **Market has largely priced in.** With GRM already came down from USD9/bbl in August to USD2.2/bbl currently, we believe negative news on additional China export quota is largely priced in. The additional China fuel export equal to around 0.85m b/d increase in oil product supply in 4Q22 which is similar to potential additional oil demand of 0.8-1.2mb/d based on IEA and EIA data. This means that refinery margin may not increase from current level if the export quota of 15mt were to be approved and could lead to around US1-2/bbl downside to our 2022F forecast.
- **The additional quota is likely a one-off**. We believe the additional export is only a one-off given weak demand from Zero covid policy. China oil demand has dropped to 12.8m b/d in July and 13.3 m b/d during Jan-July which is 0.74 m b/d lower comparing to 2021 average. The potential demand recovery in 2023F will likely be higher than potential capacity increase of 0.5m b/d in 2023F. This will allow room for Chinese refiners to ramp up their utilization rate despite higher capacity next year.

Ex 3: China Fuel Export



Source: Bloomberg

Ex 4: China Fuel Export Quota



Source: Bloomberg

Ex 5: Prices And Spreads

(US$/bbl)	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	Jul-22	Aug-22	MTD	Last week	This week
Upstream											
Dubai	66	71	77	97	108	100	108	98	93	91	91
Brent	69	73	79	98	112	99	106	98	92	91	90
Henry hub (US$/mmbtu)	2.7	3.4	3.9	4.6	7.5	8.0	7.0	8.8	8.1	7.8	7.3
NEX coal price (US$/t)	106	165	185	266	364	415	407	404	439	439	436
Crack spreads over Dubai											
Gasoline	9.9	11.6	15.5	17.8	35.0	14.0	18.6	14.3	9.0	7.2	4.5
Jet fuel	4.5	5.3	10.2	16.2	39.2	33.9	31.8	35.6	34.3	18.1	26.4
Diesel	(5.8)	(3.3)	(6.9)	(8.3)	12.5	12.5	34.0	37.7	36.7	20.8	34.5
High-sulfur fuel oil	(1.0)	1.6	3.2	(2.1)	(8.7)	(8.7)	(23.7)	(18.4)	(24.7)	(27.3)	(24.3)
Singapore complex GRM	**2.3**	**4.0**	**6.4**	**8.4**	**18.6**	**7.6**	**8.1**	**9.1**	**5.4**	**(1.2)**	**2.2**
(US$/tonne)											
Aromatics spreads											
PX-naphtha	241	240	134	192	364	364	327	378	391	402	404
BZ-naphtha	360	317	196	196	353	259	305	238	247	250	238
Olefin spreads											
HDPE-naphtha	575	462	509	413	444	367	409	346	347	342	364
LDPE-naphtha	915	740	890	731	781	610	709	574	537	532	544
PP-naphtha	694	548	558	419	431	346	386	300	371	372	384
Others											
Integrated PET	231	185	345	297	302	302	314	318	274	282	274
ABS-naphtha	1,932	1,712	1,565	1,108	1,088	888	949	870	837	832	854
Phenol-BZ	252	255	333	421	193	224	153	227	292	285	331
BPA -Phenol	2,008	2,074	1,198	843	625	350	356	335	360	357	383

Sources: TOP, Bloomberg

Ex 6: 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	13.40	19.00	*41.8*	2,418	245.3	(15.2)	2.8	3.4	2.1	1.9	12.0	10.4
BCP	BUY	31.50	39.00	*23.8*	1,157	116.4	(34.9)	4.4	6.7	3.1	4.7	5.7	3.8
ESSO	BUY	13.30	18.00	*35.3*	1,228	na	(31.1)	4.3	6.3	3.3	4.9	16.5	5.7
IRPC	BUY	3.24	4.40	*35.8*	1,766	(70.7)	489.1	57.8	9.8	12.4	7.2	4.7	5.1
IVL	HOLD	40.75	46.00	*12.9*	6,102	93.1	(26.6)	5.8	7.9	6.2	7.2	4.9	3.7
OR	SELL	26.25	21.00	*(20.0)*	8,401	19.1	7.0	24.0	22.4	13.0	11.9	1.2	1.3
PTG	BUY	16.10	20.00	*24.2*	717	50.7	19.3	17.7	14.9	7.7	6.6	2.8	3.4
PTT	BUY	37.00	42.00	*13.5*	28,184	(5.0)	4.4	12.5	12.0	4.6	4.4	5.4	5.4
PTTEP	HOLD	170.50	161.00	*(5.6)*	18,052	79.9	(9.8)	8.6	9.5	3.2	3.2	3.5	4.1
PTTGC	BUY	43.25	56.00	*29.5*	5,201	7.4	(21.9)	6.4	8.2	7.2	7.2	5.8	5.0
SPRC	BUY	11.60	15.50	*33.6*	1,341	na	(39.5)	4.4	7.3	2.7	3.9	10.3	4.0
SUSCO	BUY	4.70	6.20	*31.9*	138	46.5	11.9	14.1	12.6	7.1	6.2	4.3	4.8
TOP	BUY	53.92	70.00	*29.8*	2,933	450.0	(54.1)	3.7	8.0	5.2	9.9	5.6	4.3

Sources: Company data, Thanachart estimates

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