Energy Sector – Overweight

News Update

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Supply risk heighten amid strong demand

- **Record high US oil demand despite strong oil price**
- **IVL benefit from strong US MTBE spread**
- **Russia-Ukraine tension rising**
- **Crude premium surge while refinery supply improving**

Brent crude oil price jumped nearly 4% to US$95 per bbl following rising tension between Russia-Ukraine while US oil demand reached record high. The blow up of Russia-Ukraine could mean limit gas and oil flow from Russia which will also lead to tightness in downstream markets.

Record US oil demand despite strong oil price.

- **Record high US oil demand.** US petroleum products supplied (a proxy for demand) grew by 0.47mbd w-w to 21.9mbd. The rolling 4-week average data shows that this level is at record high. Demand has been boosted by cold weather in many parts of the US while gasoline demand was recovering from lows seen during the Covid-19 pandemic. YTD demand grew by 2.2mbd, driven by both gasoline demand of +0.95mbd and distillate demand of +0.56mbd.

- **Lowest US crude inventory since 2018.** Consequently, US commercial crude oil inventory dropped by 4.8m bbls w-w, against the +0.7m bbls build, expected by the market. Gasoline inventories decreased by another 1.6m bbls while distillate inventories saw dropped by 0.93m bbls w-w.

- **US MTBE margin surges.** Methyl tertiary-butyl ether (MTBE) is a liquid that has been used as an additive for unleaded gasoline to increases octane and oxygen levels. With robust US gasoline demand and higher crude oil price, US MTBE spread is now at US$440/t, +15% YTD. This is also the highest level since Jan 2020 and higher than pre-Covid 5-year average of US$282/t. IVL is the key beneficiary from strong US MTBE margin with MTBE capacity of 0.7mta which is 5% of IVL's total capacity.

Geopolitical tension rising

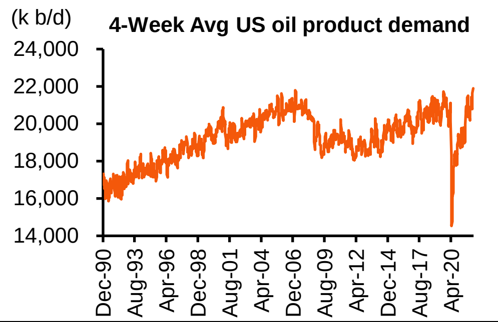
- **Russia-Ukraine tension intensify.** The U.S. believes Russia could take offensive military action or attempt to spark a conflict inside Ukraine as early as next week, before the Winter Olympics in Beijing wrap up, according to National Security Advisor Jake Sullivan. Meanwhile, US officials warned of a further build-up of Russian troops at Ukraine's borders over the past week and planned Russian military exercises in the Black Sea.

Ex 1: US Weekly data

('000 bbls)	Weekly change		
Crude Oil	(4,757)		
Gasoline	(1,645)		
Distillates	(930)		
Jet Kerosene	1,074		
(kbpd)	**Weekly change**	**% Change**	**Current number**
Production	100	0.9%	11,600
Refinery Runs	329	2.2%	15,578

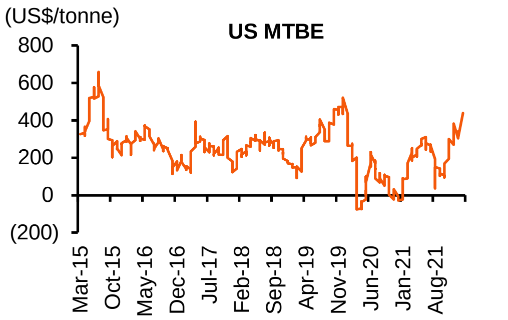
Source: EIA

Ex 2: US Oil Product Demand



Source: EIA

Ex 3: US MTBE Spread Reach 2-Yr High



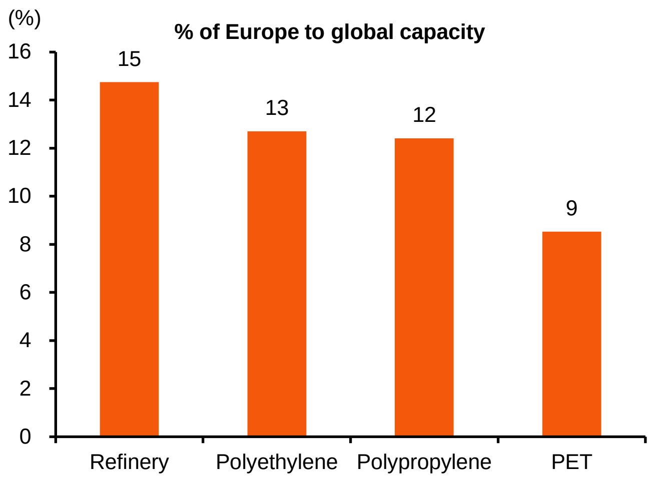
Source: Bloomberg

- **Potential impacts on energy market**. Compared to previous supply disruptions between Russia and Ukraine, the biggest difference this time is the context within which it's happening, a very tight global gas and oil market. European oil and gas inventory are both well below 5-year average. If oil and gas supply flow from Russia stop, this will lead to further tightness. As mentioned in our previous weekly report, half of Russia's crude oil exports, or about 6.5mbd go to Europe which represents about a quarter of all European oil and other product imports. Russia is also the dominant source of European's gas pipeline imports with a share of around 43% in 2020. The high-power price and lack of oil feedstocks could support cut run among petrochemical producers and refineries which Europe capacity accounts for 15% of global refining capacity and 12-13% for polyethylene and propylene capacity.
- **Still no progress on Iran's sanction**. The eighth round of indirect US-Iranian talks resumed in Vienna this week on Tuesday, February 8th 2022. Although news-outlets and analysts reported that talks are entering a "final stretch", no official statements or announcements have been made by either of the involved parties.

Ex 4: More Russian Troop Surrounding Ukraine Border

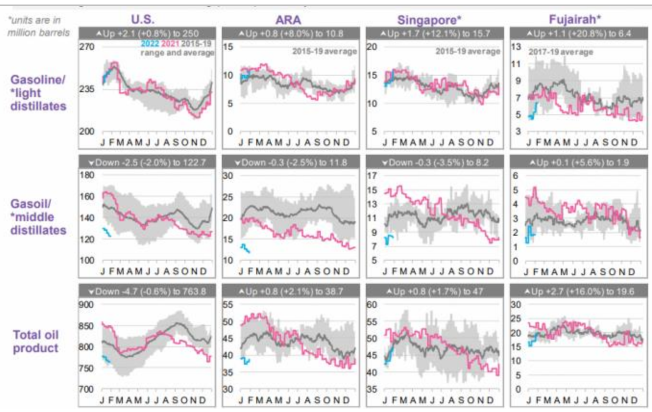
Sources: BBC, as of 11th February

Ex 5: European Capacity As % To Global



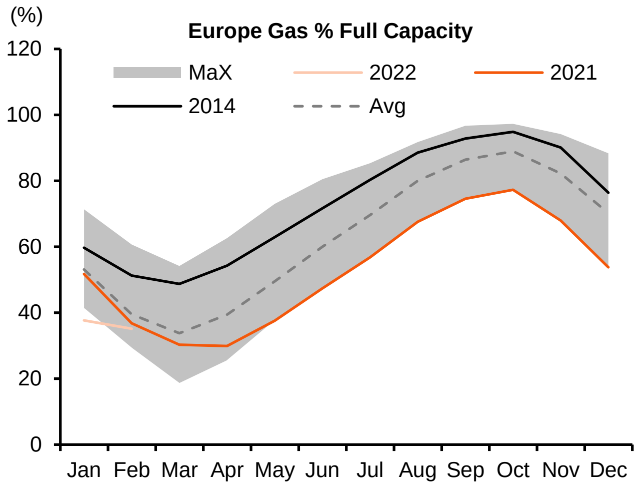
Sources: Bloomberg

Ex 6: Oil Product Inventories Are Low In All Regions



Sources: Bloomberg

Ex 7: European Gas Inventory Is Also At Low Level



Sources: Bloomberg

Strong GRM offset by rising cost

- **Crude premium surge**. Given strong demand and strong refinery margin, the price of light Murban crude has climbed steeply this month with the different to Dubai pegged at US$5.9/bbl as of 4th Feb, based on Platts data. The average for Feb was at US$5.73/bbl vs US$3.65/bbl in January. Note that the Feb price is for future loading price for April. This will be the highest level since Jan 2014. Not only Murban crude, but other crude prices have been strongly rallying. For example, the premium of Brent future to Dubai swaps has widened to the highest since late November last year.
- **Refinery supply ramping up seen in India and China.** At least 18 of India's 23 refineries operated at more than 100% of capacity last month, up from just eight in August, according to Bloomberg. Average run rates across the plants were 101% in December, compared with 87% in August. Meanwhile, China has "effectively eased" its tight diesel market after two top producers (Sinopec and CNPC) increased supply under government coordination, according to a report from the nation's state.

Ex 8: Prices And Spreads

(US$/bbl)	1Q21	2Q21	3Q21	4Q21	QTD	Nov-21	Dec-21	Jan-22	MTD	Last
Oil prices										
Dated Brent	60.84	68.63	72.94	78.40	88.15	80.75	74.27	85.49	94.05	97.59
Dubai	59.70	66.43	71.31	76.02	85.40	79.78	72.69	83.05	90.63	91.73
WTI	58.07	66.10	70.52	76.08	85.24	78.65	71.69	82.98	90.26	93.10
Crack spreads over Dubai										
Gasoline	7.49	10.67	12.41	15.59	15.18	16.31	14.49	14.79	16.05	19.15
Jet fuel	4.25	5.36	5.80	11.02	12.09	9.17	10.37	12.36	11.48	12.68
Diesel	5.37	6.09	7.48	10.12	12.39	8.89	10.71	12.10	13.04	12.42
High-sulfur fuel oil	(4.28)	(6.80)	(5.42)	(5.83)	(8.09)	(8.88)	(6.45)	(7.23)	(10.01)	(11.47)
Refining margins										
FCC / Dubai	1.21	0.95	0.85	5.81	5.82	4.21	5.78	5.93	5.55	5.78
Hydrocracking / Dubai	0.71	0.77	1.11	6.11	6.75	4.50	6.19	6.79	6.65	6.82
FCC / Espo	1.47	1.55	1.24	6.20	6.21	4.60	6.18	6.33	5.94	6.17
FCC / Arab Light	0.56	(0.51)	(0.64)	4.32	4.33	2.72	4.30	4.45	4.06	4.29
Hydrocracking / Murban	2.29	2.81	3.41	8.41	9.04	6.80	8.49	9.08	8.95	9.11
(US$/tonne)										
Aromatics spreads										
PX-naphtha	185	232	229	127	181	112	119	175	202	202
BZ-naphtha	191	367	350	231	231	193	223	239	197	197
Olefin spreads										
HDPE-naphtha	583	576	462	505	427	510	536	431	407	407
LDPE-naphtha	959	936	821	920	763	962	918	771	727	727
PP-naphtha	771	709	557	562	455	565	538	459	437	437
Ethylene-naphtha	416	406	304	321	151	307	319	156	127	127
Propylene-naphtha	461	436	294	242	232	228	254	240	197	197
Henry Hub Gas (US$/mmbtu)	2.73	2.97	4.32	3.72	4.32	5.12	3.86	4.26	4.46	3.94
Coal (Newcastle) (US$/tonne)	87.47	106.49	165.89	169.60	216.09	153.53	164.42	209.07	231.68	245.00

Source: Bloomberg

Ex 9: 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	11.30	22.00	*94.7*	2,338	na	(0.3)	4.8	4.8	4.1	3.8	6.8	7.0
BCP	BUY	29.00	32.00	*10.3*	1,221	na	169.0	23.7	8.8	6.5	6.6	6.9	6.9
ESSO	HOLD	7.75	8.00	*3.2*	820	na	na	na	11.3	18.6	8.6	0.0	0.0
IRPC	BUY	3.96	4.40	*11.1*	2,475	na	39.1	20.7	14.9	9.4	9.0	2.0	3.4
IVL	BUY	51.50	60.00	*16.5*	8,842	260.7	22.9	12.5	10.1	8.1	7.1	4.8	4.9
PTG	BUY	14.70	19.00	*29.3*	751	(39.4)	34.8	21.8	16.2	7.7	7.0	2.3	3.1
PTT	BUY	40.25	46.00	*14.3*	35,158	206.6	(13.2)	9.9	11.4	4.2	4.3	5.0	5.0
PTTEP	BUY	131.00	152.00	*16.0*	15,904	105.6	32.0	11.8	9.0	3.5	2.8	3.8	4.6
PTTGC	HOLD	57.75	56.00	*(3.0)*	7,963	286.2	(20.5)	8.8	11.1	8.7	8.8	6.9	4.5
SPRC	SELL	9.35	8.40	*(10.2)*	1,240	na	na	na	12.8	15.9	7.0	5.2	3.0
SUSCO	BUY	3.90	5.20	*33.3*	131	2.2	26.0	18.4	14.6	7.4	6.0	2.8	3.4
TOP	SELL	53.00	46.00	*(13.2)*	3,306	na	65.3	28.1	17.0	15.7	17.1	4.1	2.4

Sources: Company data, Thanachart estimates

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