Energy Sector – Neutral

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Bearish oil demand outlook

- US crude inventory rose to 2-months high
- IEA cut long-term oil demand
- LNG-fuelled trucking accelerates in Asia
- PX margins struggle

Weekly US data: US crude inventory rose to 2-months high

- Crude inventories increased by 5.5 million barrels compared with analysts' expectations of 0.8-million-barrel built and a draw of 2.2 million barrel in the previous week.
- Gasoline stocks also build marginally by 0.9 million barrels in the week. This compared with a draw of 2.2 million barrels for the previous week. In middle distillates, inventory show a draw of 1.1 million barrels. This compared with a stock draw of 3.5 million barrels for the previous week.

IEA cut long-term oil demand

- Global oil demand will decline faster than expected in the coming decades -- creating a likely supply surplus -- as electric vehicles continue to erode oil use in road transport, while biofuels and hydrogen deflate the need for oil in the aviation and shipping sectors, the International Energy Agency said Oct. 16. After increasing by about 2.6 million bpd from 2023-30F, global oil demand will peak by 2030F and fall to 93.1 million bpd by 2050F, according to the base-case scenario in the IEA latest annual World Energy Outlook. The new 2050F demand projection is 4.3 million bpd lower than last year's report.
- Impact. With transport oil demand increasingly shifting from oil to electricity and alternative liquid fuels in the coming years, the IEA predicting a potential overhang of oil supply in the second half of the 2020s. We see this could lead to lower oil price and refinery margin over a longer-term.

LNG-fuelled trucking accelerates in Asia, denting diesel demand

- China oil demand trend lower. Trucking fleets in China are embracing cleaner-burning liquefied natural gas (LNG) for fuel. The rise of LNG trucks in China comes on top of world-leading electric vehicle (EV) adoption there and a prolonged economic slowdown, dampening demand in what for decades has been the main driver in oil consumption growth, with crude imports down 2.8% so far this year, weakening global prices.
- Chinese LNG-fuelled truck sales doubled in 1H24 vs. 2023. Sales of LNG-fuelled trucks in China surged in the first half of 2024 after a plunge in local LNG prices to 108,862 vehicles, more than double the same period in 2023, according to information provider CVWorld, with government subsidies and tighter emissions standards in recent years paving the way. In China, LNG trucks have been especially popular in the

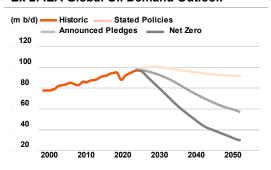
News Update

Ex	1:	US	Weekly	data

(m bbls)	Weekly change	Consensus	Last week
Crude Oil	5.474	0.800	-2.191
Gasoline	0.878	-1.600	-2.201
Distillates	-1.140	-2.000	-3.534
(k bpd)	Weekly change	% Change	Current
			number
Production	+100.0	+0.1%	13,500
Refinery Runs	+177	+1.1%	16,067

Source: EIA

Ex 2: IEA Global Oil Demand Outlook



Source: IEA

Note: Excludes biofuels, other liquid fuels

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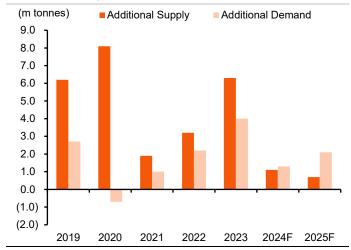
north, near its gas fields, accounting for over half of new truck sales there last year, according to Energy Aspects.

- India also target to increase use of LNG-fuelled truck. With only 645 LNG-powered trucks operating in India according to transport ministry data, its rollout is at an earlier stage, but the government said in September it aims to convert about one-third of its heavy truck fleet of over 7 million vehicles in five to seven years.
- Impact. Given China and India have been the key diesel demand growth centres, the weakness in both augurs poorly for diesel cracks. Globally, Wood Mackenzie expects natural gas vehicles used in road freight to displace around 360,000 bpd of diesel usage in 2024F and 380,000 bpd in 2025F. This will negatively impact all of the Thai refiners which have diesel as a major product.

PX margins struggle

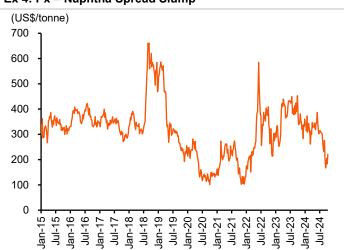
- Px-naphtha spread collapsed. Despite the lower new supply this year, the Px-naphtha spread also set to disappoint. The spread has dropped to US\$161/t, lower by 28% w-w and 52% lower comparing to 3Q24 average of US\$336/t. This is given the ample PX available currently and stuttering buying interest seen through the year.
- Impact. The disappointing Px spread will negatively impact TOP (SELL, TP Bt39) and PTTGC who are the main Px producers.





Source: Company data

Ex 4: Px - Naphtha Spread Slump



Source: Bloomberg

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Ex 5: Prices And Spreads

	Unit	This	Last	%	———— Quarterly ————							——— Yearly ———			
		week	week	chg	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	2022	2023	2024		
Upstream															
Dubai	(US\$/bbl)	74	74	0.2%	87	84	82	85	79	76	97	81	82		
Brent	(US\$/mmbtu)	76	73	4.1%	86	83	82	85	79	76	99	82	82		
Henry hub	(US\$/mmbtu)	2.6	2.3	13.4%	2.7	2.9	2.1	2.3	2.2	2.6	6.5	2.6	2.2		
JKM Spot	(US\$/mmbtu)	13.8	13.3	3.9%	12.3	15.6	9.7	11.2	13.0	13.3	34.0	13.9	11.3		
Dutch TTF	(EUR/MWh)	44	39	11.0%	34	43	28	32	36	40	132	41	32		
NEX coal price	(US\$/tonne)	145	145	-0.3%	147	136	127	136	140	146	357	188	134		
Crack spreads	over Dubai														
Gasoline	(US\$/bbl)	11.7	11.1	5.0%	16.6	18.9	12.6	17.9	11.6	11.0	18.8	16.7	12.7		
Jet fuel	(US\$/bbl)	12.2	12.5	-2.1%	14.0	26.1	23.6	21.1	13.6	12.1	30.3	22.5	14.7		
Diesel	(US\$/bbl)	11.8	12.9	-8.1%	14.6	26.9	21.1	21.7	14.0	12.2	34.3	21.9	14.9		
HSFO	(US\$/bbl)	(3.1)	(5.1)	-39.6%	(8.7)	(5.4)	(11.0)	(9.7)	(3.4)	(4.3)	(14.1)	(10.3)	(5.8)		
SG GRM	(US\$/bbl)	5.4	4.9	11.7%	5.4	10.9	6.3	8.1	4.9	4.6	11.5	7.9	5.7		
Aromatics															
PX-naphtha	(US\$/tonne)	161	222	-27.5%	407	407	349	323	336	193	299	378	307		
BZ-naphtha	(US\$/tonne)	241	292	-17.5%	275	273	269	326	391	268	267	267	356		
Olefin															
HDPE-naphtha	(US\$/tonne)	321	322	-0.3%	436	361	350	333	350	300	392	390	340		
LDPE-naphtha	(US\$/tonne)	491	492	-0.2%	443	363	372	454	519	470	683	427	508		
PP-naphtha	(US\$/tonne)	341	342	-0.3%	403	305	303	302	331	315	386	359	321		
Others															
Integrated PET	(US\$/tonne)	166	169	-2.0%	194	114	134	138	130	162	278	161	144		
Phenol-BZ	(US\$/tonne)	90	86	4.7%	79	89	64	(52)	(38)	56	279	80	9		
BPA -Phenol	(US\$/tonne)	280	300	-6.7%	299	270	327	317	303	220	551	294	278		

Sources: TOP, Bloomberg

Ex 6: Valuation

	5.0						DO		55		DITDA							
	Rating	Current	Target	Upside/	Market	t Norm EPS grw		Norm PE		EV/E	EV/EBITDA		— P/BV —		— Yield —		— ROE —	
		price	price	(Downside)	сар	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F	
		(Bt)	(Bt)	(%)	(US\$ m)	(%)	(%)	(x)	(x)	(x)	(x)	(x)	(x)	(%)	(%)	(%)	(%)	
BANPU	BUY	6.25	8.00	28.0	1,853	(32.2)	9.5	11.2	10.2	6.1	5.8	0.5	0.5	5.4	4.9	4.3	4.6	
BCP	BUY	33.25	53.00	59.4	1,355	(2.8)	11.7	4.9	4.3	4.2	3.8	0.6	0.5	4.9	5.5	12.5	12.8	
BSRC	BUY	7.10	11.00	54.9	727	27.2	38.5	7.6	5.5	5.2	4.1	8.0	8.0	4.8	6.8	11.1	14.2	
IRPC	SELL	1.49	1.50	0.7	901	na	104.6	49.8	24.3	11.3	10.0	0.4	0.4	0.0	8.0	8.0	1.6	
IVL	BUY	25.25	20.00	(20.8)	4,195	183.0	57.2	31.3	19.9	7.3	6.6	0.9	0.9	0.0	1.5	3.4	5.2	
OR	SELL	15.80	13.80	(12.7)	5,611	(5.3)	6.4	18.1	17.0	9.3	8.8	1.7	1.6	3.1	3.3	9.4	9.6	
PTG	SELL	9.45	6.80	(28.0)	467	(8.0)	6.0	16.7	15.8	4.0	4.1	1.7	1.6	2.7	2.8	10.5	10.5	
PTT	SELL	33.25	29.00	(12.8)	28,105	(9.8)	2.1	10.6	10.4	4.1	3.8	0.8	0.8	6.0	6.0	8.0	8.0	
PTTEP	BUY	126.00	188.00	49.2	14,803	(2.5)	(7.6)	6.5	7.1	1.8	1.9	0.9	0.9	7.5	7.1	14.7	12.6	
PTTGC	SELL	24.00	25.00	4.2	3,202	na	720.0	117.3	14.3	9.9	7.7	0.4	0.4	3.1	2.6	0.3	2.7	
SCC	BUY	204.00	275.00	34.8	7,244	(3.7)	66.5	17.0	10.2	16.6	8.9	0.7	0.6	2.9	4.9	3.9	6.3	
SPRC	BUY	6.55	9.80	49.6	840	na	(3.3)	8.3	8.6	4.9	4.4	0.7	0.7	3.1	3.2	9.1	8.3	
TOP	SELL	44.00	39.00	(11.4)	2,909	(41.5)	(16.6	6.1	7.3	7.9	9.3	0.6	0.5	3.5	4.5	9.6	7.7	

Sources: Company data, Thanachart estimates

THANACHART SECURITIES 3

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