January 2, 2024

Energy

Thailand

Thailand Energy Sector

Year Ahead 2024: Resilient earnings, attractive valuation

POSITIVE *[Unchanged]*

BCP and PTT remain our Top Picks

We remain POSITIVE on the Thai energy sector given its resilient earnings outlook and attractive valuation. We forecast flattish aggregate earnings for the sector in FY24E followed by strong 13% growth in FY25E. At the same time, valuations remain attractive with average sector P/BV of 0.79x, well below its 10-year average of 1.14x. BCP remains our Top Pick on its gross refining margin (GRM) outperformance, potential upside risk from synergies, and lower P/E (5.5x) in the sector. We also like PTT for its earnings growth outlook and valuation discount, especially when compared to PTTEP. We upgrade our FY24E earnings for TOP by 55% and raise our TP to THB60 as we factor in lower cost associated with oil spill (from USD2/bbl to USD1/bbl in FY24E). The TP upgrade also incorporates the impact of rolling over our target price to end-2024E.

Muted oil price outlook

We maintain our oil price forecast at USD80/75 per bbl in 2024-25E, down from USD83/bbl in 2023. We expect oil demand growth to exceed 1mbd globally in 2024E, driven by resumption of jet fuel demand and continued growth in the petrochemical sector. This is likely to be sufficient to absorb global output growth of 1mbd. Despite continuing output growth in non-OPEC+ countries (US, Canada, Guyana and Brazil), we think voluntary output cuts by OPEC+ will be sufficient to keep the market balanced and oil prices in the USD80/bbl range.

Stay bullish refining

Refining remains our most preferred segment as we see on-going tightness in the refined product market lasting through at least 2025E. Our GRM forecast remains unchanged at USD7/bbl for both FY24E and FY25E. Slowdown in capacity addition (from 1.9mbd in 2023E to 1.1mbd in 2024E), low existing product inventories, and logistical inefficiencies will likely keep crack spreads elevated, led by diesel and jet fuel.

Potential regulatory changes and their impacts

We see potential downside risks to earnings for PTT and PTTGC if the proposed change to natural gas cost for gas separation plants (GSP) is to be adopted. This would increase the gas feed cost for GSP as it would create a single pool price which includes the price of the most costly LNG imports into the GSP feed cost structure. We estimate potential downside risks to earnings of up to 6.3%/5.5% in FY24/25E for PTT and 64%/39% for PTTGC based on prevailing prices in 3Q23.

Analyst
Chak Reungsinpinya
(66) 2658 5000 ext 1399
chak.reungsinpinya@maybank.com

Stock	Bloomberg code	Mkt cap (USD'm)	Rating	Price (LC)	TP (LC)	Upside (%)	P/E (x) 23E	P/E (x) 24E	P/B (x) 23E	P/B (x) 24E	Div yld (%) 23E	Div yld (%) 24E
PTT	PTT TB	29,917	Buy	35.75	42.00	23	9.8	9.6	0.9	0.9	5.1	5.2
PTT E&P	PTTEP TB	17,388	Buy	149.50	194.00	36	7.6	7.8	1.2	1.1	6.8	6.6
PTTGC	PTTGC TB	5,086	Sell	38.50	28.00	(26)	95.7	38.3	0.6	0.6	0.5	1.3
Thai Oil	TOP TB	3,518	Buy	53.75	60.00	14	10.5	12.6	0.7	0.7	2.4	2.0
BCP	BCP TB	1,755	Buy	43.50	59.00	41	6.0	5.5	0.9	0.8	5.7	6.4
IRPC	IRPC TB	1,209	Buy	2.02	2.40	20	96.4	161.6	0.5	0.5	0.7	0.4
Star Petroleum	SPRC TB	1,048	Buy	8.25	12.40	56	9.9	7.2	0.9	0.9	6.3	6.3

1. BCP and PTT remain our top picks

1.1 Flattish earnings in FY24E; growth to resume in FY25E

We expect energy sector earnings to improve to flat growth in FY24E compared to the 38% YoY decline in FY23E due to the high-base in FY22A caused by the impacts from the war in Ukraine. We forecast aggregate sector profit of THB212b in FY24E, essentially unchanged from FY23E. This is because profit growth at PTT, BCP, and PTTGC are offset by lower earnings from PTTEP and TOP. However, we expect growth to resume in FY25E with a 11% YoY aggregate profit increase to THB235b, driven by PTT and TOP. Note that sector earnings in FY25E will still be below pre-war levels in FY21 mainly because of very weak profit at PTTGC due to the petrochemical downcycle.

Fig 1: Energy sector aggregate profit

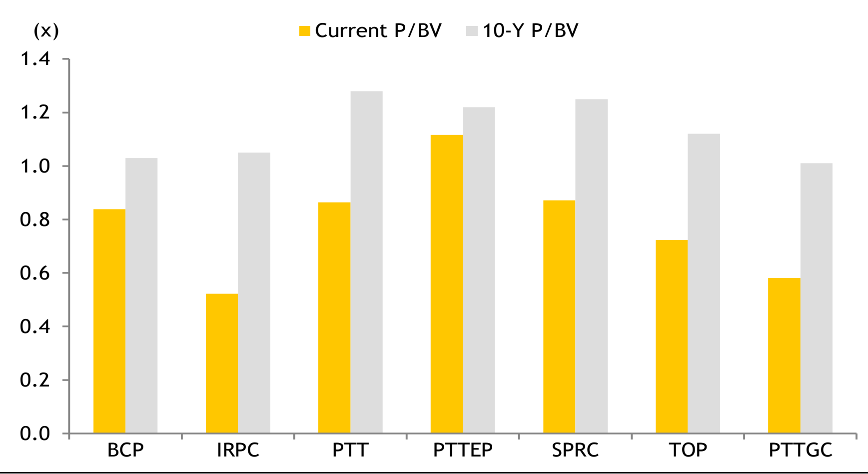
Company	2021	2022	2023E	2024E	2025E
BCP	3,119	17,993	9,904	10,865	11,060
IRPC	6,028	622	428	255	1,710
PTT	146,790	160,536	104,170	106,116	121,288
PTTEP	44,137	90,721	77,636	75,716	70,678
SPRC	-168	9,510	3,617	4,993	5,801
TOP	4,579	45,125	11,464	9,520	17,041
PTTGC	42,878	13,792	1,814	4,531	7,387
Total profit	247,363	338,300	209,034	211,997	234,965

Source: Company, MST

1.2 Valuation remains attractive

We believe Thai energy sector valuations remain attractive with essentially all stocks trading well below their 10-year P/BV multiples. We think this steep valuation discount is unjustified given resilient earnings outlook and that the 10-year multiples include periods with very depressed valuations (downturns in 2016 and during Covid pandemic). Thai energy companies are also active in pursuing their carbon emissions goals with most companies that we cover aspiring to achieve Net Zero by 2050 and others by 2060.

Fig 2: Thai energy current P/BV vs 10-year average

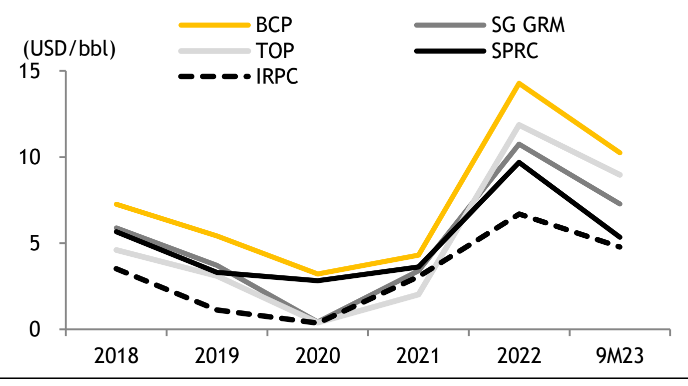


Source: Company, MST

1.3 BCP is our refinery top pick

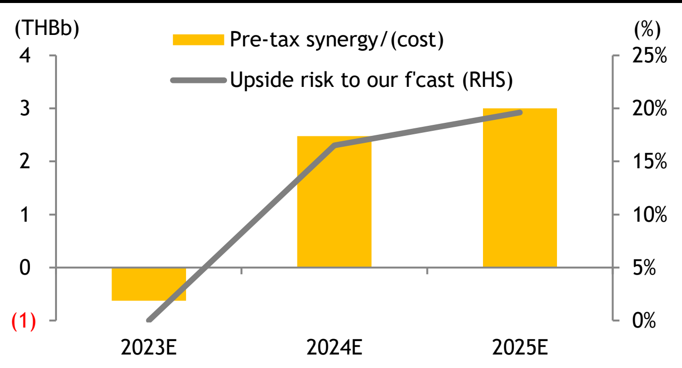
BCP remains our top pick for three main reasons. First, BCP consistently outperforms its peers in terms of GRM, as it is best positioned to take advantage of low light-sweet crude premium and high diesel crack spread (of which BCP has the highest yield among Thai refiners). Second, it is the only company that will benefit from earnings accretion from acquisition with potential upside from synergy which offers up to 17% and 20% upside risks to our FY24-25E earnings forecasts, respectively. Lastly, BCP faces limited headwinds, neither in its operations (oil spill impact TOP and SPRC) nor exposure to petrochemical downcycle (IRPC, PTTGC). Valuations remain attractive at 0.8x P/BV, 5.5x P/E and 3.6x EV/EBITDA for FY24E.

Fig 3: BCP's consistent GRM outperformance vs peers



Source: Company, MST

Fig 4: Potential synergies offer upside risks to FY24-25E

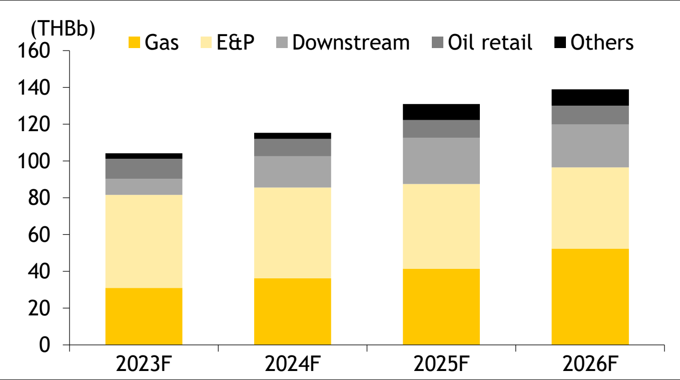


Source: Company, MST

1.4 PTT best of the big-caps

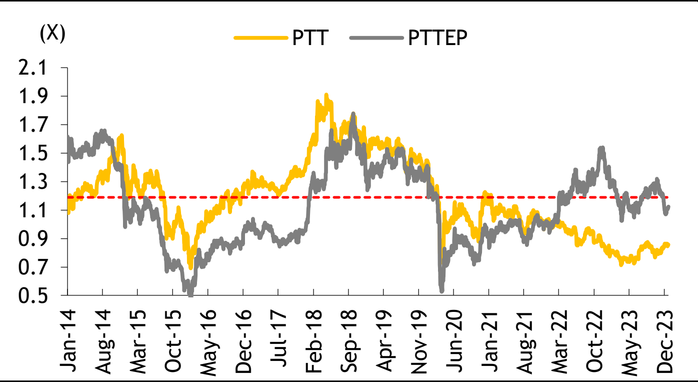
We like PTT the most among big-cap energy names. First, we expect 8% normalised EPS CAGR in FY24-25E driven by margin expansion for core gas business (falling gas cost) and subsidiaries' earnings growth (mostly refining). Second, we view PTT as attractively valued at just 0.86x P/BV (vs 10-year average 1.2x and our TP implied P/BV of 1.0x). PTT is also trading at a 0.25x P/BV discount to PTTEP's 1.12x P/BV compared to its historical premium of 0.06x. Last, PTT offers high dividend yields of 5.1%-5.9% in FY23-25E. While potential regulatory changes pose potential downside risks (details below), we think the long-term impact is much less than the current price levels would imply and the risk is likely priced in.

Fig 5: PTT net profit breakdown



Source: Company, MST

Fig 6: PTT P/BV vs PTTEP's



Source: Company, MST

2. Muted oil price outlook

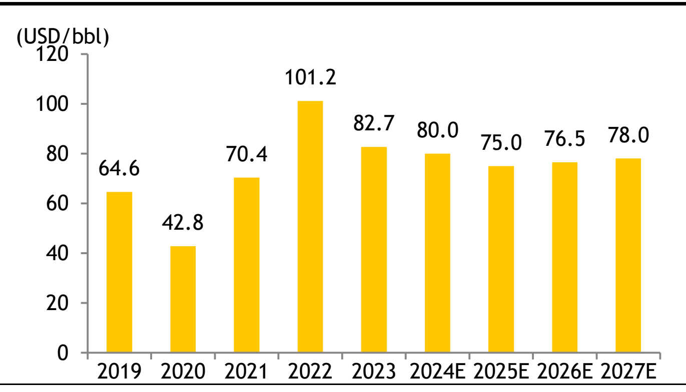
2.1 Maintain our Brent oil price forecasts at USD80/75 per bbl in 2024/25E

We maintain our Brent oil price forecasts of USD80/bbl in 2024E and USD75/bbl in 2025E, down from USD83/bbl in 2023. Despite slower demand growth and rising output by non-OPEC+ countries (led by the US, Canada, Brazil, Guyana, and Norway), we believe OPEC+ will continue to maintain a balance in the oil market. The recent round of voluntary cuts for 1Q24, which are deeper and have greater participation by OPEC+ member countries, is an encouraging sign that the group will continue to work together going forward.

Fig 7: Brent oil prices

Source: Bloomberg, MST

Fig 8: Our Brent oil price forecasts



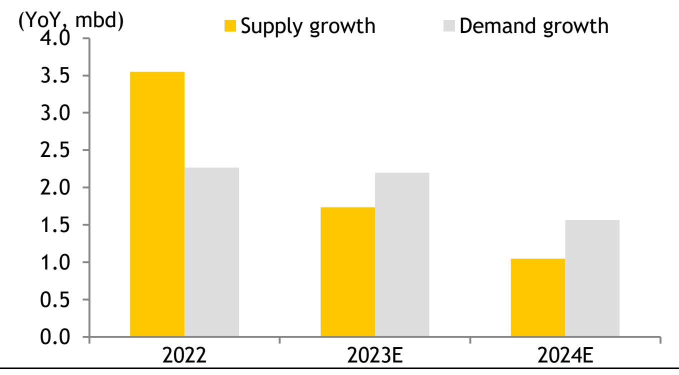
Source: Bloomberg, MST

2.2 Demand growth likely to exceed 1mbd in 2024E

Diverging demand forecasts

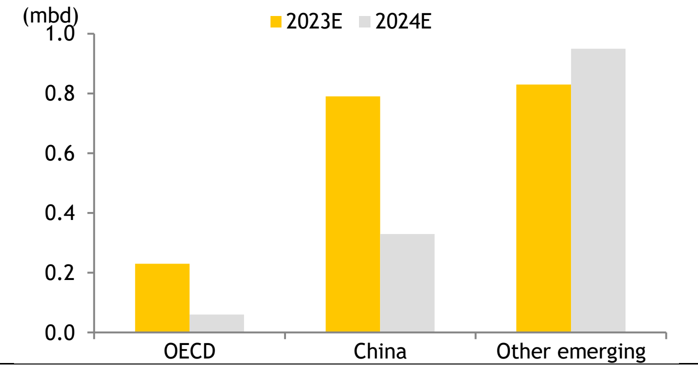
Oil demand growth forecasts for 2024E remain divergent among major forecasters. The International Energy Agency (IEA) remains the most bearish of the three, expecting just 1.1mbd demand growth next year. Even so, this figure has already been revised upwards in Dec from the 0.93mbd the IEA had forecasted earlier. At the opposite end, OPEC remains the most bullish with its forecast of 2.25mbd demand growth in 2024E following 2.45mbd growth in 2023E. OPEC expects robust growth even for developed markets (+0.26mbd) as well as accelerating growth in Asia ex China & India as well as in other emerging economies. The US Energy Information Administration's (EIA) forecast is in the middle as it forecasts 1.34mbd demand growth in 2024E. We note, however, that the EIA's forecast for 2023E is the most conservative at just 1.85mbd growth vs the IEA's 2.3mbd and OPEC's 2.45mbd.

Fig 9: Avg oil demand/supply growth by major agencies



Source: IEA, EIA, OPEC, MST

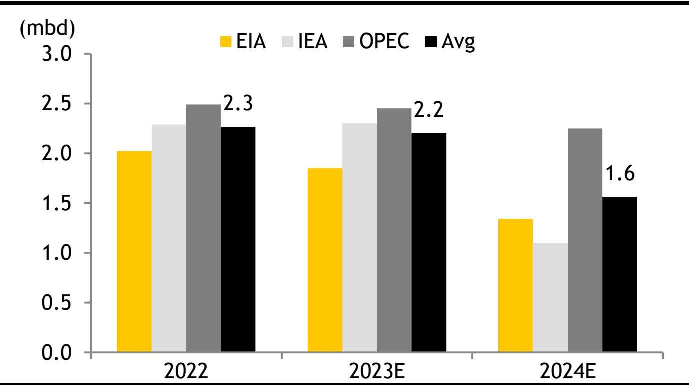
Fig 10: Oil demand growth by region



Source: IEA, MST

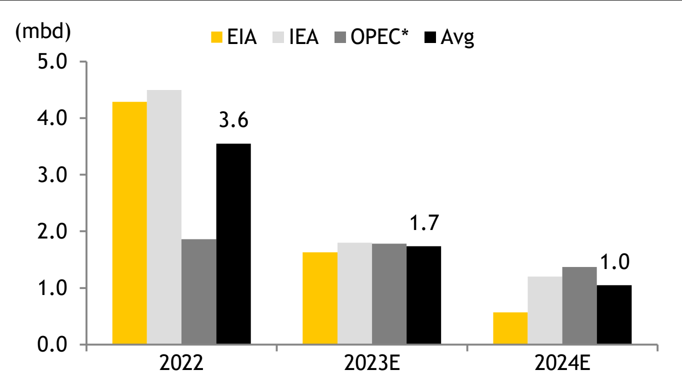
Regardless of the forecasts, we believe demand growth is likely to be well above 1mbd. This is because jet fuel demand remains almost 1mbd below its pre-COVID level while demand for petrochemical feedstock is likely to keep increasing given significant new capacity. The average demand forecasts for the three agencies stand at 1.56mbd for 2024E and the median value being 1.34mbd.

Fig 11: Oil demand growth forecasts



Source: IEA, EIA, OPEC, MST

Fig 12: Oil supply growth forecasts

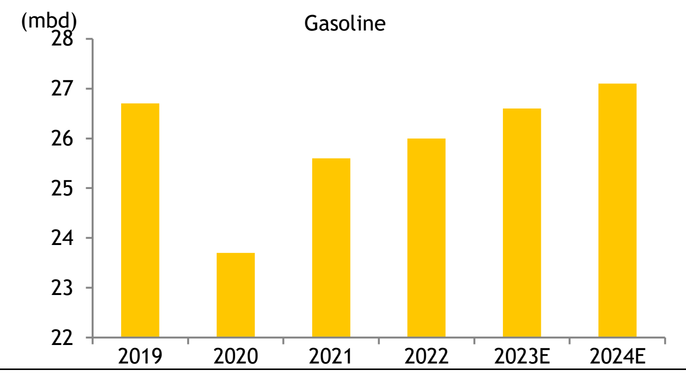


Source: IEA, EIA, OPEC, MST
Note: OPEC forecasts for non-OPEC supply growth only

Jet fuel remains the key growth driver

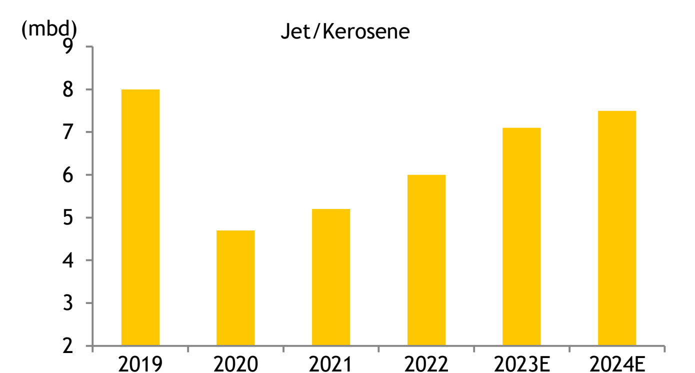
Part of the reason global oil demand growth is likely to be well over 1.0mbd in 2024E is the normalization of jet fuel demand. At just 7.1mbd, demand for jet fuel in 2023E is still nearly 1mbd below where it was in 2019. In 2024E, jet fuel demand is likely to grow another 400kbd to 7.5mbd which is still half a million bpd below its 2019 level. We also expect gasoline demand to continue growing albeit at a slower pace (+0.4mbd in 2024E vs +0.6mbd in 2023E). On the other hand, demand for diesel/gasoil is likely to remain stagnant on lower electricity generation usage. Likewise, demand for residual fuel oil is likely to normalize as its usage in electricity generation continues to normalize from a very high base in 2022 (due to gas shortage in that year).

Fig 13: Global gasoline demand



Source: IEA, MST

Fig 14: Global jet fuel/kerosene demand



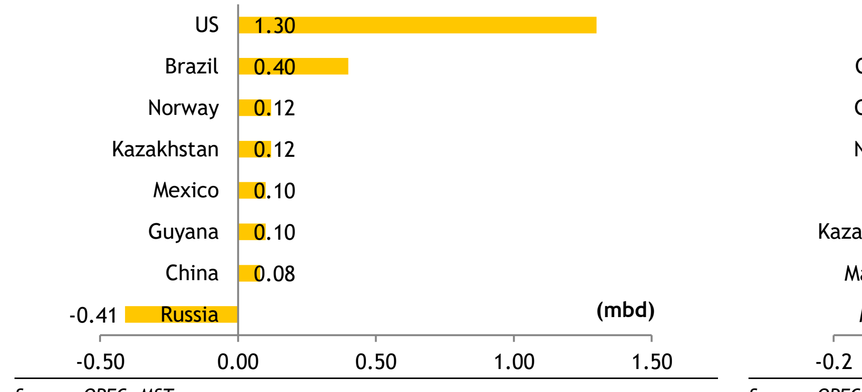
Source: IEA, MST

2.3 Non-OPEC+ production growth to cap oil prices

US continues to lead output growth

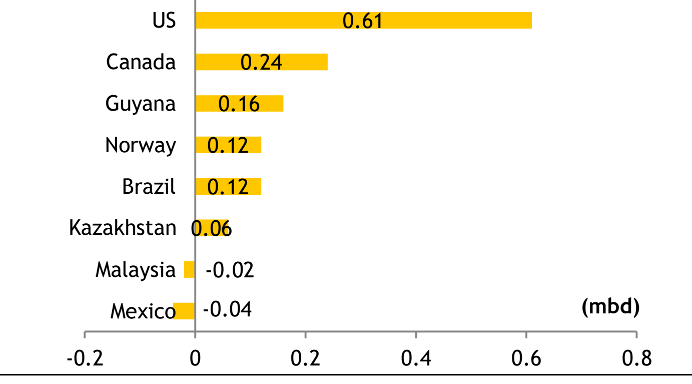
As was the case in 2023, we expect global supply growth to be driven by non-OPEC+ countries in 2024E. The US will again lead production growth, although the pace of increase is set to slow down markedly to 0.6mbd in 2024E from 1.3mbd in 2023E. Canada is emerging as a surprise growth driver with potentially up to 240kbd of growth. The other countries that will see significant output increases are Guyana (160kbd), Norway (120kbd), and Brazil (120kbd).

Fig 15: 2023E output growth by selected country



Source: OPEC, MST

Fig 16: 2024E output growth by selected country

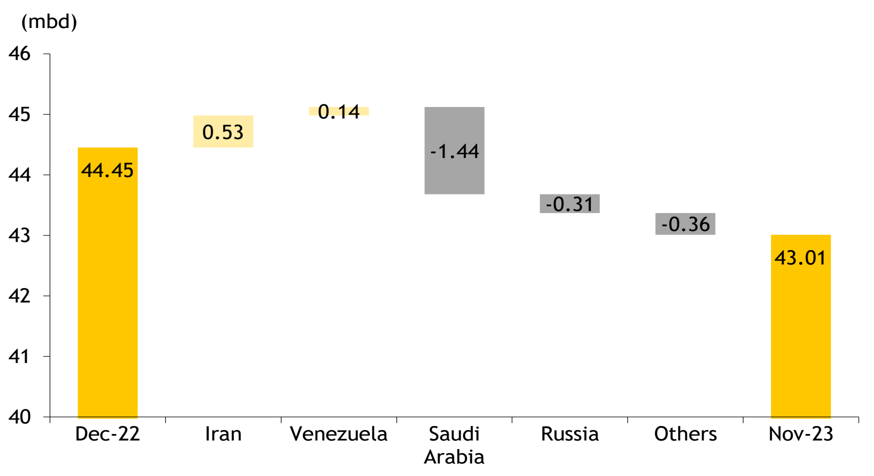


Source: OPEC, MST

Rising production from Iran and Venezuela

Rising output from Iran and Venezuela has further complicated OPEC+ efforts to balance the market in 2023. In Nov 2023, Iranian output has grown to 3.19mbd, up 530kbd (20%) from the Dec 2022 level. Similarly, Venezuelan output grew 140kbd YTD, equivalent to 21% production growth. We believe output from these two nations may climb further in 2024E given easing sanction measures and enforcement by Western countries.

Fig 17: Changes in OPEC+ output YTD



Source: IEA, MST

2.4 Voluntary cuts by OPEC+ to balance the market

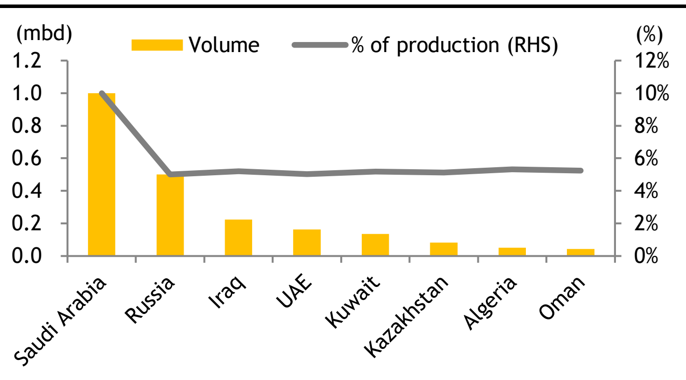
Despite continued growth in non-OPEC+ output growth (US, Brazil, Guyana) and potential for further increases in Iranian and Venezuelan supplies, we believe the additional voluntary cuts announced by OPEC+ will be sufficient to balance the market. The extra voluntary cuts amounting to 2.2mbd include rollover of voluntary cuts of 1mbd by Saudi Arabia and 0.3mbd by Russia. In addition, Russia has promised to reduce its fuel export by another 0.2mbd, bringing its voluntary reduction to 0.5mbd. Unlike in the preceding 4 months, this time around, the two major producers will be joined by other OPEC+ countries. Iraq will reduce output by 223kbd, UAE by 163kbd, Kuwait 135kbd, Kazakhstan 82kbd, Algeria 51kbd and Oman 42kbd. These cuts are equivalent to about 5% of existing production for these countries. We think the broad-based effort shows OPEC+ intent to help balance the market which would help keep oil prices in the USD80/bbl range.

Fig 18: Actual and target output for OPEC+19 in the cut deal

(mbd)
Actual output
Target
44
42
40
38
36
34
32
Jun 22
Aug 22
Oct 22
Dec 22
Feb 23
Apr 23
Jun 23
Aug 23
Oct 23
Dec 23
Feb 24

Source: IEA, MST

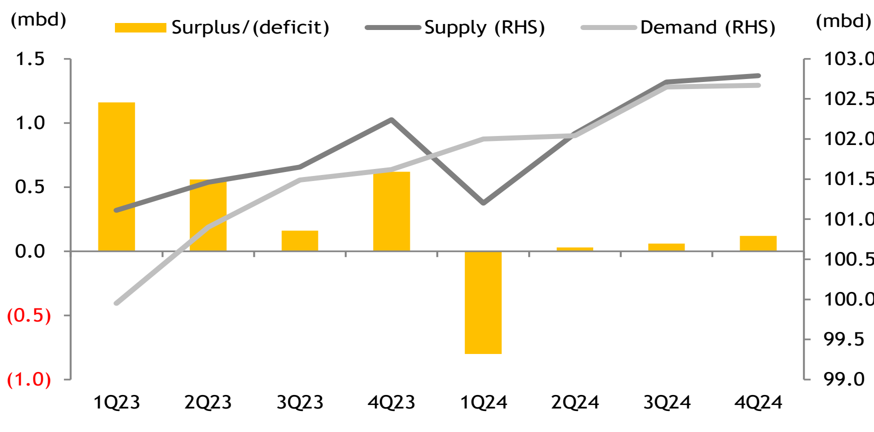
Fig 19: OPEC+ voluntary production cuts 1Q24



Source: IEA, MST

Based on current demand growth, we think 1Q24 could see oil supply deficit if OPEC+ carries out its voluntary cut to the full extent. This is also partially aided by the seasonal dip in US output. Heading into 2Q-4Q24E, we think the market will be relatively balanced with potential for small surpluses.

Fig 20: Global oil demand/supply balance



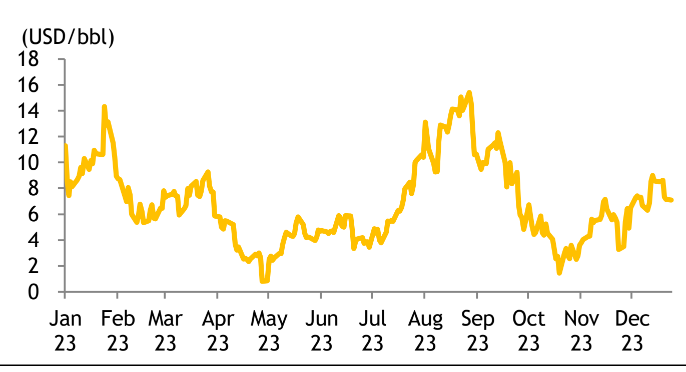
Source: EIA, MST

3. Stay bullish refining

3.1 Singapore GRM forecasts at USD7/bbl in 2024-25E

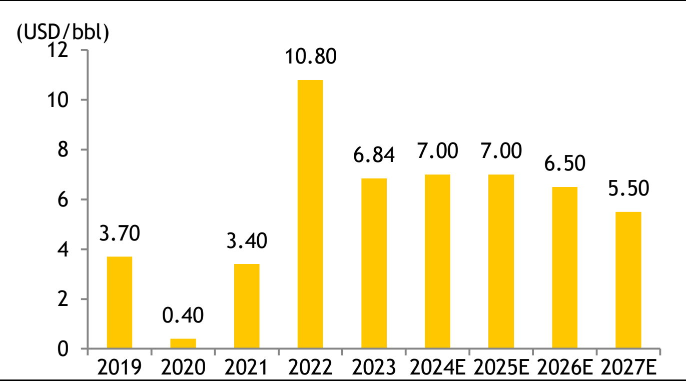
We maintain our Singapore gross refining margin (GRM) forecasts at USD7.0/bbl in 2024-25E as we expect demand/supply balance to remain tight. We forecast GRM will drop marginally to USD6.5/bbl in 2026E. Our long-term assumption from 2027E is USD5.5/bbl which we view as conservative given the long-term average of USD6.1/bbl (2006-19 average).

Fig 21: Singapore GRM



Source: Company, MST

Fig 22: Our Singapore GRM forecasts

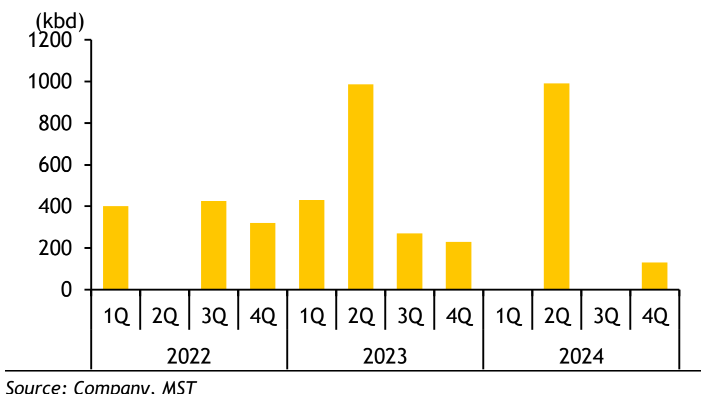


Source: Company, MST

3.2 Slower pace of refinery start-ups

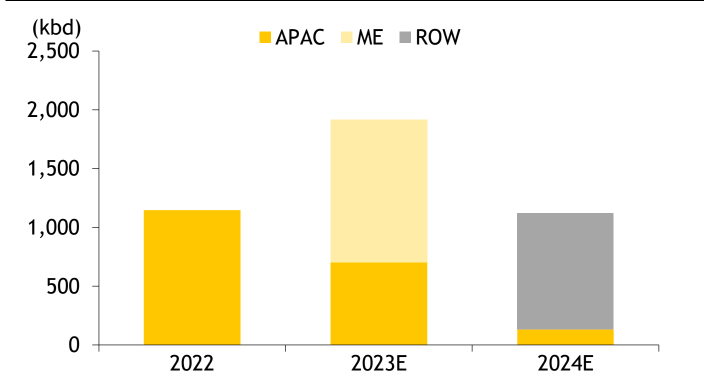
We expect the pace of new refinery start-ups to slow markedly, from over 1.9mbd in 2023E to just 1.1mbd in 2024E. This is likely to match with demand growth of 1mbd or more, keeping the market relatively tight. Moreover, the majority of new capacity is located in Africa and North America with just 130kbd of capacity being added in Asia Pacific / Middle East. The biggest refinery start-ups next year are Dangote refinery in Nigeria (650kbd) and Dos Bocas refinery in Mexico (340kbd). The regional capacity growth in 2024E contrasts sharply with 2022-23E where essentially all of the new refining capacity was located in APAC and the Middle East. Given that Asia Pacific and the Middle East will likely account for 50% or more of global demand growth, the relatively little new capacity in these two regions will likely support Singapore gross refining margins.

Fig 23: Quarterly refinery start-ups



Source: Company, MST

Fig 24: New refinery start-ups by region



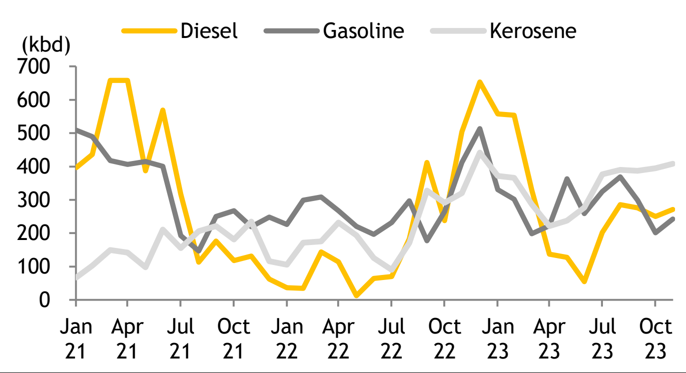
Source: Company, MST

3.3 Lower China's and India's oil product exports

China's exports of oil products remained well contained in recent months. While diesel exports recovered to 270kbd in Nov, this was less than half of the peak seen in Dec 2022. Likewise, gasoline exports remained subdued at 240kbd, well below the peak of 510kbd. Note that exports of jet fuel/kerosene continued to rise although this was likely driven by more international flights as China accounted for jet fuel on outbound flights as exports.

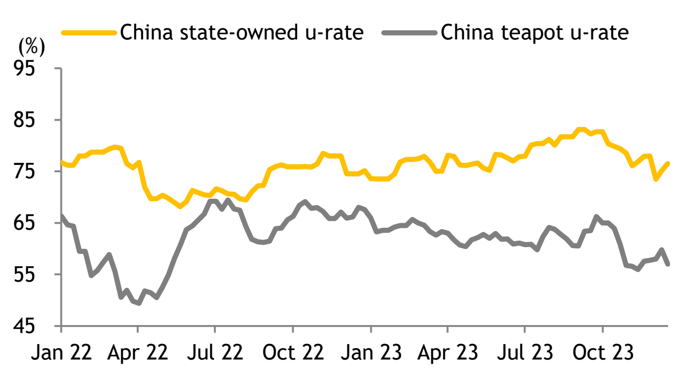
Going forward, we expect China's exports of oil products to remain subdued. For one, the government has maintained its cap on crude oil import quotas for independent (so-called "teapot") refineries at 243m tons for 2024, unchanged from 2022-23 levels. This is likely to limit the volume of feedstock these refineries have. In fact, we have seen utilization rates among independent refiners retreat in recent months, likely due to lack of feedstock. The recent additional quota for fuel oil import of 3m tons is likely to be just a small and temporary reprieve. For state-owned refineries, we also expect their product exports to be restricted by limited export quotas as well as stronger domestic demand.

Fig 25: China net exports of diesel and gasoline



Source: Bloomberg, MST

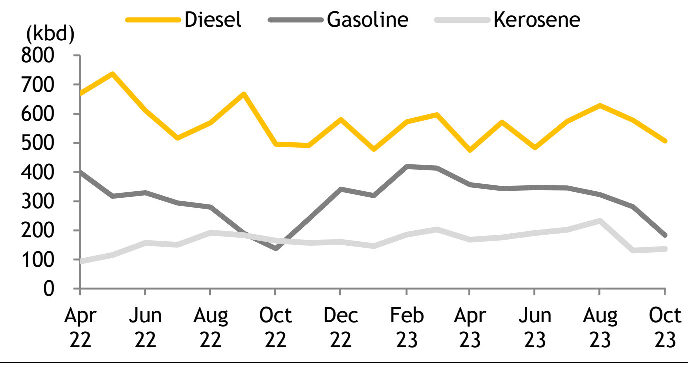
Fig 26: China refinery utilization rates



Source: Bloomberg, MST

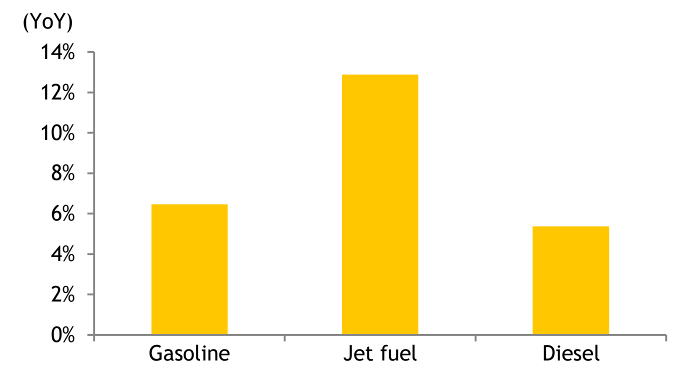
Besides China's exports, India's exports of oil products has also been coming down in recent months. During Apr-Oct 2023, India's exports of diesel, gasoline and kerosene declined by 1% from the same period of last year. This was mostly driven by a 10% YoY decline in diesel exports which more than offset growth in other product categories. We believe part of the reason for India's reduced export volume was the growth in domestic consumption as demand for these fuels grew 6-13% YoY during this period.

Fig 27: India's exports of oil products



Source: PPAC, MST

Fig 28: India's YoY demand growth (Apr-Nov 2023)

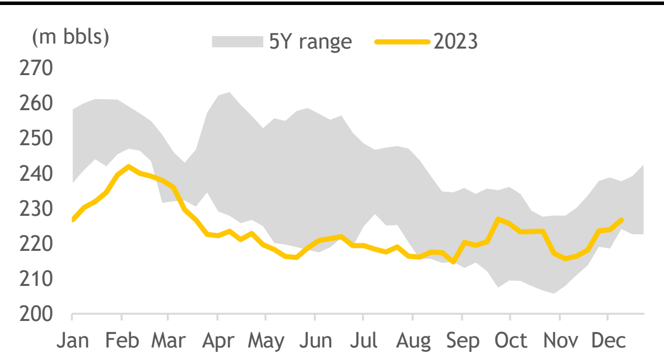


Source: PPAC, MST

3.4 Inventories remain well below 5-year averages

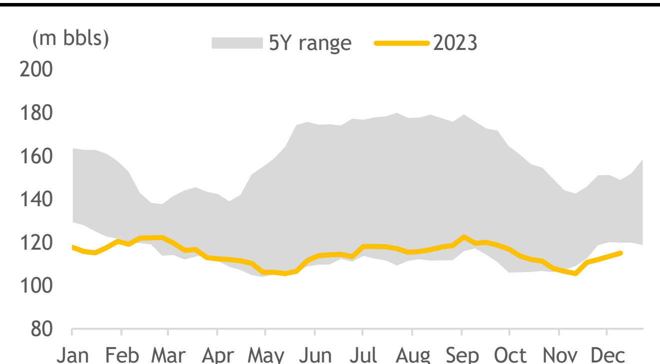
Inventories for key refined products remain low compared to historical levels. In the US, gasoline inventories are 2% below their 5-year average for this time of year whereas middle distillate inventories (diesel, jet fuel) are 10% below their 5-year average.

Fig 29: US gasoline inventories



Source: EIA, MST

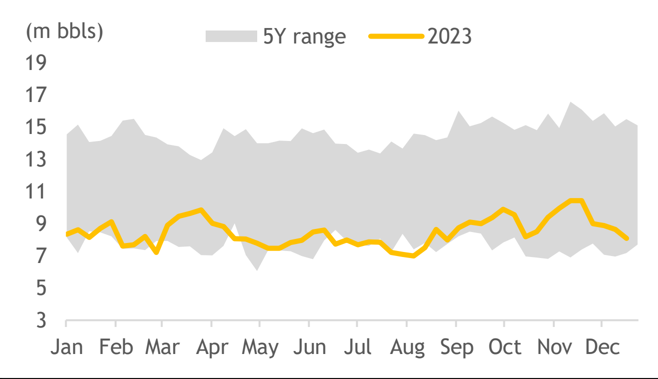
Fig 30: US middle distillate inventories



Source: EIA, MST

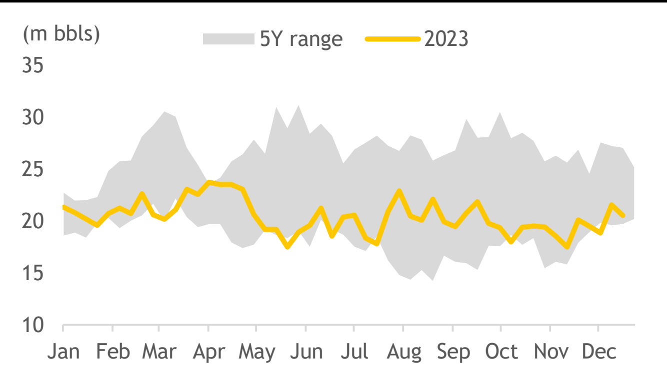
Similarly, inventories in Singapore - a key oil trading hub for Asia - remain at the low end of the range. Distillate inventories are 27% below their 5-year average for this time of year. At the same time, residue inventories (mostly fuel oil for ship bunkering) are 8% below their 5-year average. Only inventories of light distillates (which include naphtha for petrochemical feedstock and gasoline) are 2% above their 5-year average.

Fig 31: Singapore distillate inventories



Source: EIA, MST

Fig 32: Singapore residue inventories

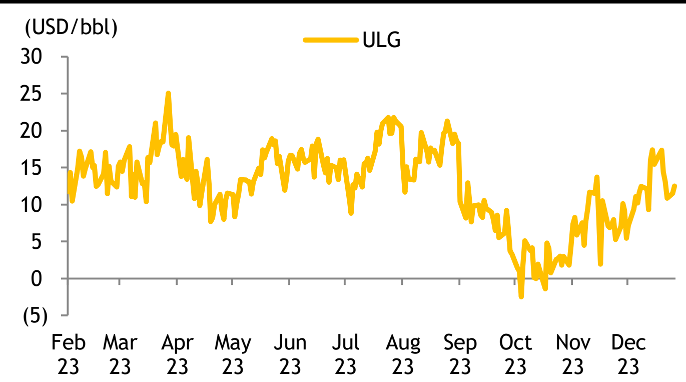


Source: EIA, MST

3.5 Diesel crack spread continues to lead

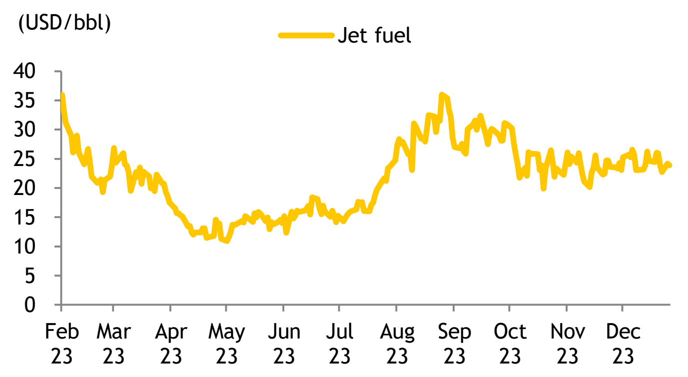
We expect diesel crack spreads will continue to lead the pack. This is because of the low diesel inventories globally, limited supplies of crude oils that produce the most diesel yield, and limited impact of EVs on diesel demand. Diesel may also benefit from the knock-on impacts of increasing jet fuel demand, both coming from the middle distillate pool. On the other hand, we think high sulfur fuel oil (HSFO) will continue to suffer from the impacts of IMO2020 and increasing adoption of alternative ship bunkering fuels (LNG, LPG, and others).

Fig 33: Gasoline crack spread over Dubai



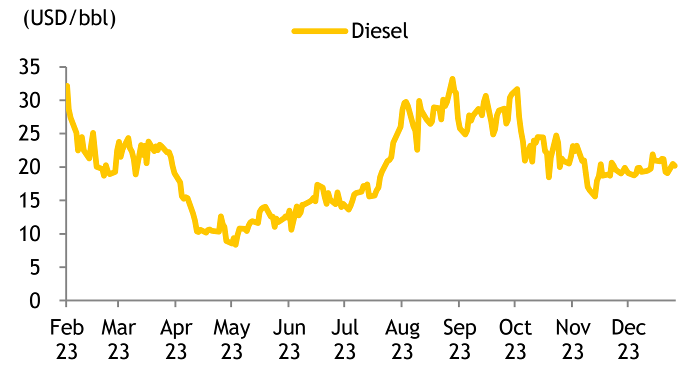
Source: Bloomberg, MST

Fig 34: Jet fuel crack spread over Dubai



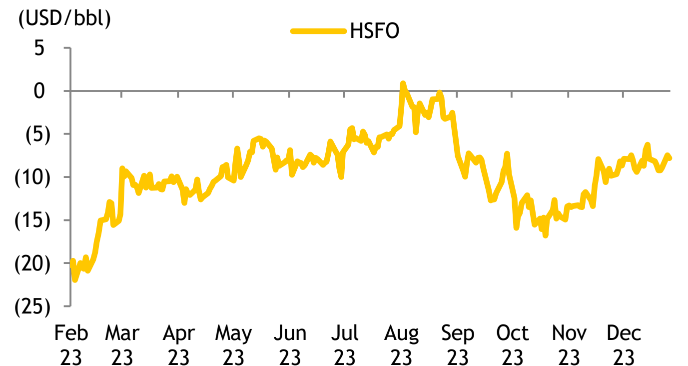
Source: Bloomberg, MST

Fig 35: Diesel crack spread over Dubai



Source: Bloomberg, MST

Fig 36: High-sulfur fuel oil (HSFO) crack spread over Dubai



Source: Bloomberg, MST

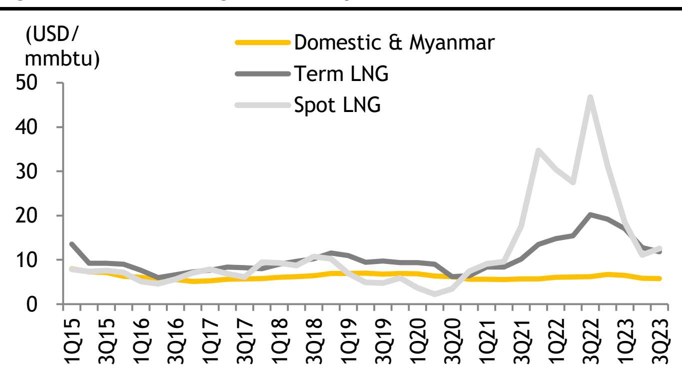
4. Potential regulatory changes and their impacts

4.1 Proposed change to gas cost structure for GSP

Existing price structure

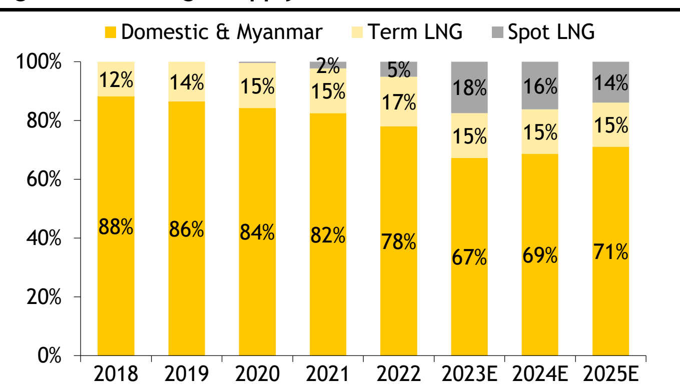
Currently, the feed cost for PTT's GSP (gas separation plants) is based on domestic gas prices only. This is because it only uses gas produced in the Gulf of Thailand as feedstock. The imported gas - either from Myanmar or liquefied natural gas (LNG) - does not contain the wet gas components and thus cannot be used as feedstock for GSP. For all other consumers of natural gas (especially the power sector), however, the feed cost comprises a blend of the domestic gas and imported gas.

Fig 37: Domestic vs global LNG prices



Source: Company, MST

Fig 38: Thailand gas supply mix

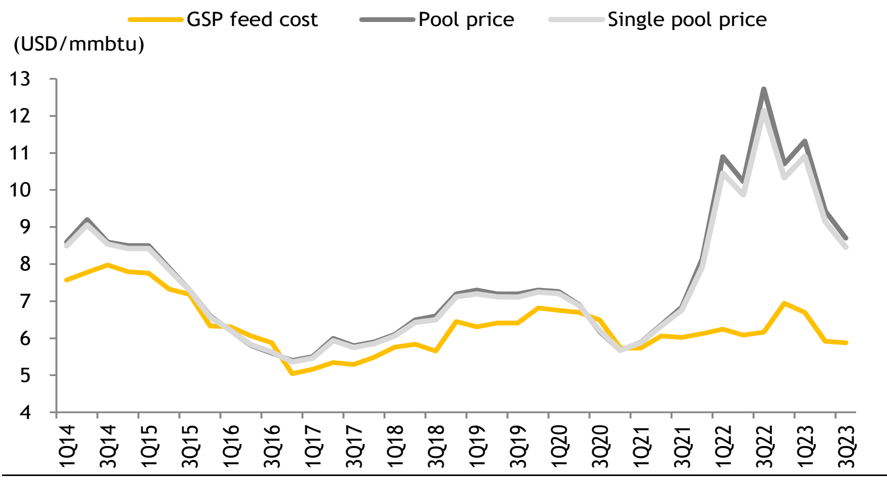


Source: Company, MST

Proposed change to gas pricing structure

The proposed change to the gas price structure is for GSP to use the same blended cost (so-called "single pool price") as every other sector. This means the price of GSP feed cost will also include the cost of LNG imports even though GSP does not actually use LNG as feedstock. In the current price environment, this change could substantially increase the feed cost for GSP. At the same time, it could marginally help reduce the pool gas cost for all other sectors.

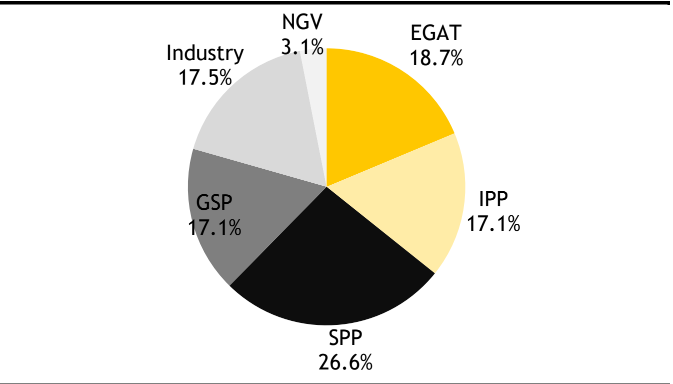
Fig 39: GSP and pool gas prices vs theoretical "single price"



Source: Company, MST

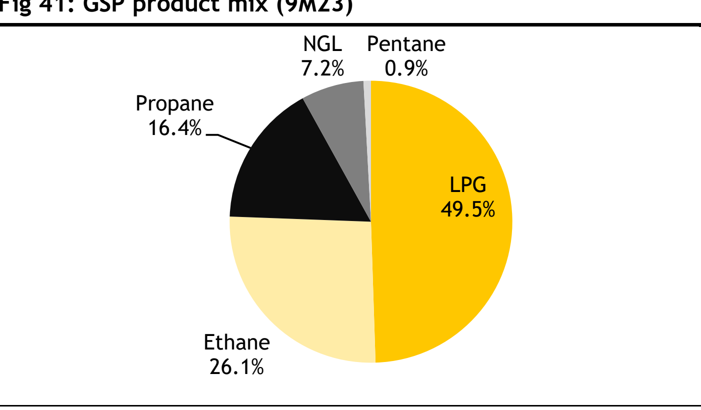
Based on 3Q23 actual prices, we estimate that GSP feed cost would increase by USD2.6/mmbtu (from 5.9 to 8.5 USD/mmbtu). At the same time, the pool gas price would be reduced by USD0.2/mmbtu (from 8.7 to 8.5 USD/mmbtu). In our calculation of this "single pool price", we also assume that only half of GSP feed gas will be subjected to the new pricing structure. This is because half of GSP output is LPG for cooking gas which PTT is already selling at cost. If the government were to increase the feed cost for this portion, it would lead to increases in the price of cooking gas as well. We think this is undesirable from a political point of view.

Fig 40: Thailand natural gas consumption by sector (9M23)



Source: Company, MST

Fig 41: GSP product mix (9M23)

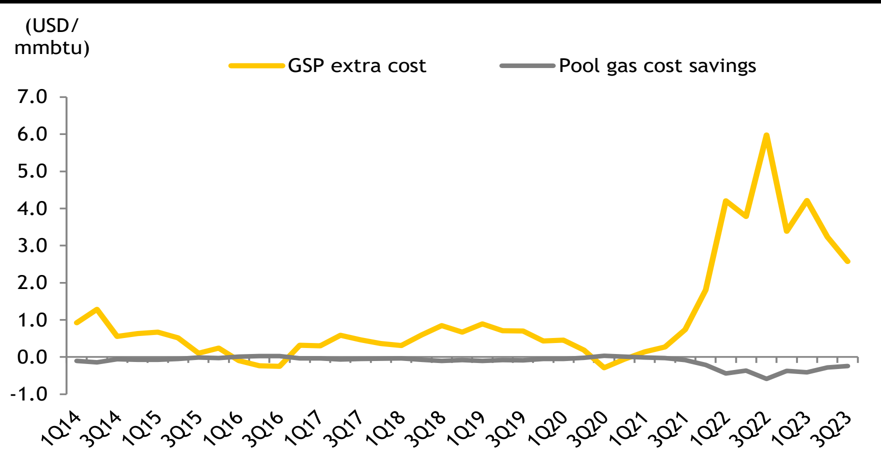


Source: Company, MST

4.2 Potential impacts - PTTGC most at risk

While we still do not know if or when the proposed change will be adopted, if they were to be adopted today, we estimate the total impact to PTT group to be about THB12b pre-tax pa based on 3Q23 prices. We estimate the increase in GSP gas feed cost to be THB3.34b pa. On the other hand, PTT would partially benefit from lower feed cost for other gas units, chiefly gas sales to industrial users (IUs) and natural gas for vehicles (NGV). We estimate this positive margin impact to be THB370m pa.

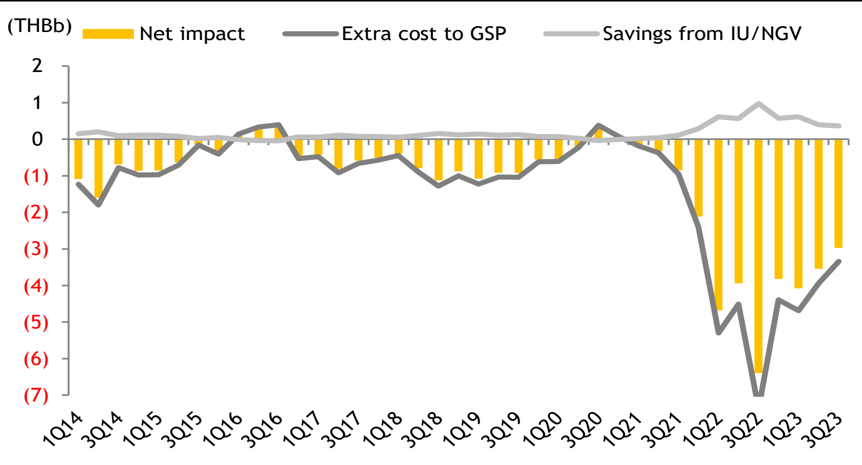
Fig 42: Potential additional costs for GSP



Source: Company, MST

Additionally, we still do not know how the extra cost burden would be shared between PTT and PTTGC under this scenario. This is because PTT sells ethane gas feedstock to PTTGC based on a profit-sharing mechanism whereas all other gases (propane, etc) are sold at market prices. Assuming PTT is responsible for 70% of total cost increase, we estimate the negative profit impact to be THB6.7b in FY24-25E for PTT (equivalent to 6.3% and 5.5% potential downside risks in FY24-25E, respectively). The potential negative impact on PTTGC is THB2.88b pa, or -64% and -39% of FY24-25E profit, respectively.

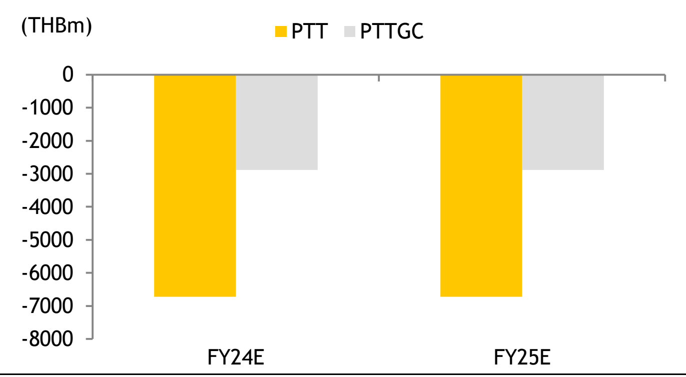
Fig 43: Potential impact on PTT group's P/L based on historical data



Source: Company, MST

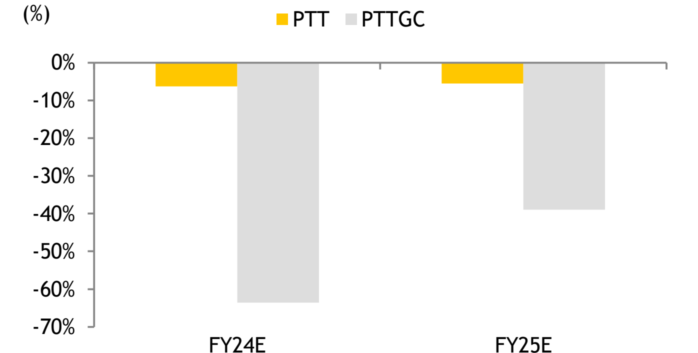
We note that, historically, the difference between domestic gas (basis for GSP feed cost) and pool price (which also incorporates LNG import cost) has not always been as large as in the most recent quarters. The war in Ukraine has pushed up gas prices globally since early 2022 but prices are now returning to a more normal level. Had we applied this change to pricing structure to pre-war levels (2014-2021 data), we estimate the potential negative impact to PTT group as a whole to be just THB2.6b pa on average. Even if we account for the need for Thailand to import more LNG than in the past, we think the total negative impact to PTT group long-term would be less than THB5b pa.

Fig 44: Potential P/L impacts (assume 70/30 PTT/PTTGC split)



Source: Company, MST

Fig 45: Potential impact on P/L (% of forecast earnings)



Source: Company, MST

Research Offices

ECONOMICS

Suhaimi ILIAS
Chief Economist
Malaysia | Philippines | Global
(603) 2297 8682
suhaimi_ilias@maybank-ib.com

CHUA Hak Bin
Regional Thematic Macroeconomist
(65) 6231 5830
chuahb@maybank.com

Dr Zamros DZULKAFLI
Malaysia | Philippines
(603) 2082 6818
zamros.d@maybank-ib.com

Erica TAY
China | Thailand
(65) 6231 5844
erica.tay@maybank.com

Brian LEE Shun Rong
Indonesia | Singapore | Vietnam
(65) 6231 5846
brian.lee1@maybank.com

Fatin Nabila MOHD ZAINI
(603) 2297 8685
fatinnabila.mohdzaini@maybank-ib.com

Luong Thu Huong
(65) 6231 8467
hana.thuhuong@maybank.com

FX

Saktiandi SUPAAT
Head of FX Research
(65) 6320 1379
saktiandi@maybank.com

Fiona LIM
(65) 6320 1374
fionalim@maybank.com

Alan LAU
(65) 6320 1378
alanlau@maybank.com

Shaun LIM
(65) 6320 1371
shaunlim@maybank.com

STRATEGY

Anand PATHMAKANTHAN
ASEAN
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com

FIXED INCOME

Winson PHOON, FCA
Head of Fixed Income
(65) 6340 1079
winsonphoon@maybank.com

SE THO Mun Yi, CFA
(603) 2074 7606
munyi.st@maybank-ib.com

PORTFOLIO STRATEGY

ONG Seng Yeow
(65) 6231 5839
ongsengyeow@maybank.com

MIBG SUSTAINABILITY RESEARCH

Jigar SHAH
Head of Sustainability Research
(91) 22 4223 2632
jigars@maybank.com

Neerav DALAL
(91) 22 4223 2606
neerav@maybank.com

REGIONAL EQUITIES

Anand PATHMAKANTHAN
Head of Regional Equity Research
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com

WONG Chew Hann, CA
Head of ASEAN Equity Research
(603) 2297 8686
wchewh@maybank-ib.com

MALAYSIA

WONG Chew Hann, CA *Head of Research*
(603) 2297 8686
wchewh@maybank-ib.com
• Equity Strategy
• Non-Bank Financials (stock exchange)
• Construction & Infrastructure

Anand PATHMAKANTHAN
(603) 2297 8783
anand.pathmakanthan@maybank-ib.com
• Equity Strategy

Desmond CH'NG, BFP, FCA
(603) 2297 8680
desmond.chng@maybank-ib.com
• Banking & Finance

ONG Chee Ting, CA
(603) 2297 8678
ct.ong@maybank-ib.com
• Plantations - Regional

YIN Shao Yang, CPA
(603) 2297 8916
samuel.y@maybank-ib.com
• Gaming – Regional
• Media • Aviation • Non-Bank Financials

TAN Chi Wei, CFA
(603) 2297 8690
chiwei.t@maybank-ib.com
• Power • Telcos

WONG Wei Sum, CFA
(603) 2297 8679
weisum@maybank-ib.com
• Property • Glove

Jade TAM
(603) 2297 8687
jade.tam@maybank-ib.com
• Consumer Staples & Discretionary

Nur Farah SYIFAA
(603) 2297 8675
nurfarahsyifaa.mohamadfuad@maybank-ib.com
• Renewable Energy • REITs

LOH Yan Jin
(603) 2297 8687
lohyanjin.loh@maybank-ib.com
• Ports • Automotive • Technology (EMS)

Jeremie YAP
(603) 2297 8688
jeremie.yap@maybank-ib.com
• Oil & Gas • Petrochemicals

Arvind JAYARATNAM
(603) 2297 8692
arvind.jayaratnam@maybank.com
• Technology (Semicon & Software)

TEE Sze Chiah *Head of Retail Research*
(603) 2082 6858
szechiah.t@maybank-ib.com
• Retail Research

Nik Ihsan RAJA ABDULLAH, MSTA, CFTe
(603) 2297 8694
nikmohdihsan.ra@maybank-ib.com
• Chartist

Amirah AZMI
(603) 2082 8769
amirah.azmi@maybank-ib.com
• Retail Research

SINGAPORE

Thilan WICKRAMASINGHE *Head of Research*
(65) 6231 5840
thilanw@maybank.com
• Banking & Finance - Regional
• Consumer

Eric ONG
(65) 6231 5849
ericong@maybank.com
• Healthcare • Transport • SMIDs

LI Jialin
(65) 6231 5845
jialin.li@maybank.com
• REITs

Jarick SEET
(65) 6231 5848
jarick.seet@maybank.com
• Technology

Krishna GUHA
(65) 6231 5842
krishna.guha@maybank.com
• REITs

PHILIPPINES

Rachelleen RODRIGUEZ, CFA *Head of Research*
(63) 2 8849 8843
rachelleen.rodriguez@maybank.com
• Banking & Finance • Transport • Telcos
• Utilities

Daphne SZE
(63) 2 8849 8847
daphne.sze@maybank.com
• Consumer

Alexa Mae CARVAJAL
(63) 2 8849 8838
alexamae.carvajal@maybank.com
• Consumer • Gaming • Property • REITs

THAILAND

Chak REUNGSINPINYA *Head of Research*
(66) 2658 5000 ext 1399
chak.reungsinpinya@maybank.com
• Strategy • Energy

Jesada TECHAHUSDIN, CFA
(66) 2658 5000 ext 1395
jesada.t@maybank.com
• Banking & Finance

Wasu MATTANAPOTCHANART
(66) 2658 5000 ext 1392
wasu.m@maybank.com
• Telcos • Technology • REITs • Property
• Consumer Discretionary

Surachai PRAMUALCHAROENKIT
(66) 2658 5000 ext 1470
surachai.p@maybank.com
• Auto • Conmat • Contractor • Steel

Suttatip PEERASUB
(66) 2658 5000 ext 1430
suttatip.p@maybank.com
• Food & Beverage • Commerce

Natchaphon RODJANAROWAN
(66) 2658 5000 ext 1393
natchaphon.rodjanarowan@maybank.com
• Utilities

Boonyakorn AMORNSANK
(66) 2658 5000 ext 1394
boonyakorn.amornsank@maybank.com
• Services

INDONESIA

Jeffrosenberg CHENLIM *Head of Research*
(62) 21 8066 8680
jeffrosenberg.lim@maybank.com
• Strategy • Banking & Finance • Property

Willy GOUTAMA
(62) 21 8066 8500
willy.goutama@maybank.com
• Consumer

Etta Rusdiana PUTRA
(62) 21 8066 8683
etta.putra@maybank.com
• Telcos • Internet • Construction

William Jefferson W
(62) 21 8066 8563
william.jefferson@maybank.com
• Property

Adi WICAKSONO
(62) 21 8066 8686
adi.wicaksono@maybank.com
• Plantations

Satriawan HARYONO, CEWA, CTA
(62) 21 8066 8682
satriawan@maybank.com
• Chartist

VIETNAM

Quan Trong Thanh *Head of Research*
(84 28) 44 555 888 ext 8184
thanh.quan@maybank.com
• Strategy • Banks

Hoang Huy, CFA
(84 28) 44 555 888 ext 8181
hoanghuy@maybank.com
• Strategy • Technology

Le Nguyen Nhat Chuyen
(84 28) 44 555 888 ext 8082
chuyen.le@maybank.com
• Oil & Gas • Logistics

Nguyen Thi Sony Tra Mi
(84 28) 44 555 888 ext 8084
trami.nguyen@maybank.com
• Consumer Discretionary

Tran Thi Thanh Nhan
(84 28) 44 555 888 ext 8088
nhan.tran@maybank.com
• Consumer Staples

Nguyen Le Tuan Loi
(84 28) 44 555 888 ext 8182
loi.nguyen@maybank.com
• Property

Nguyen Thanh Hai
(84 28) 44 555 888 ext 8081
thanhhai.nguyen@maybank.com
• Industrials

Nguyen Thanh Lam
(84 28) 44 555 888 ext 8086
thanhlam.nguyen@maybank.com
• Retail Research

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Malaysia

Maybank Investment Bank Berhad
(A Participating Organisation of
Bursa Malaysia Securities Berhad)
33rd Floor, Menara Maybank,
100 Jalan Tun Perak,
50050 Kuala Lumpur
Tel: (603) 2059 1888;
Fax: (603) 2078 4194

Stockbroking Business:
Level 8, Tower C, Dataran Maybank,
No.1, Jalan Maarof
59000 Kuala Lumpur
Tel: (603) 2297 8888
Fax: (603) 2282 5136

Singapore

Maybank Securities Pte Ltd
Maybank Research Pte Ltd
50 North Canal Road
Singapore 059304

Tel: (65) 6336 9090

London

Maybank Securities (London) Ltd
PNB House
77 Queen Victoria Street
London EC4V 4AY, UK

Tel: (44) 20 7332 0221
Fax: (44) 20 7332 0302

Hong Kong

MIB Securities (Hong Kong) Limited
28/F, Lee Garden Three,
1 Sunning Road, Causeway Bay,
Hong Kong

Tel: (852) 2268 0800
Fax: (852) 2877 0104

Indonesia

PT Maybank Sekuritas Indonesia
Sentral Senayan III, 22nd Floor
Jl. Asia Afrika No. 8
Gelora Bung Karno, Senayan
Jakarta 10270, Indonesia

Tel: (62) 21 2557 1188
Fax: (62) 21 2557 1189

India

MIB Securities India Pte Ltd
1101, 11th floor, A Wing, Kanakia
Wall Street, Chakala, Andheri -
Kurla Road, Andheri East,
Mumbai City - 400 093, India

Tel: (91) 22 6623 2600
Fax: (91) 22 6623 2604

Philippines

Maybank Securities Inc
17/F, Tower One & Exchange
Plaza
Ayala Triangle, Ayala Avenue
Makati City, Philippines 1200

Tel: (63) 2 8849 8888
Fax: (63) 2 8848 5738

Thailand

Maybank Securities (Thailand) PCL
999/9 The Offices at Central World,
20th - 21st Floor,
Rama 1 Road Pathumwan,
Bangkok 10330, Thailand

Tel: (66) 2 658 6817 (sales)
Tel: (66) 2 658 6801 (research)

Vietnam

Maybank Securities Limited
Floor 10, Pearl 5 Tower,
5 Le Quy Don Street,
Vo Thi Sau Ward, District 3
Ho Chi Minh City, Vietnam

Tel : (84) 28 44 555 888
Fax : (84) 28 38 271 030

Sales Trading

Indonesia
Helen Widjaja
helen.widjaja@maybank.com
(62) 21 2557 1188

London
Greg Smith
gsmith@maybank.com
Tel: (44) 207-332-0221

Philippines
Keith Roy
keith_roy@maybank.com
Tel: (63) 2 848-5288

India
Sanjay Makhija
sanjaymakhija@maybank.com
Tel: (91)-22-6623-2629

www.maybank.com/investment-banking
www.maybank-keresearch.com