

Oil & Gas

13 March 2023

MONTHLY UPDATE

Industry

Oil & Gas

Turnaround in marketing margins

Economic growth concern and marginal rise in OPEC supply keep oil prices on check

Crude oil prices were largely flattish during Feb'23 and dropped between 0.5%-2.5% and were trading in between \$79-\$86/bbl. Fear of global recession and higher OPEC output led to rise in global inventory level. Though OPEC production rose 150kbpd in Feb'23, still 700kbpd lower from Sep'22. US oil inventory rose for the third month in a row and increased 27mn bbls to 480 mn bbls while OECD inventory increased marginally by 11mn bbls to 2.8 bn. However, impact of lower oil prices were reflecting in rig addition as number of rigs in US declines further by 14 rigs in Feb'23 to 758 rigs.

LNG price continues its downward journey, in line with expectations

Asian spot LNG prices continued their downtrend this week, hitting the lowest level since July 2021, due to tepid demand growth and higher inventory levels. During Feb'23, Japan Korea LNG marker price dipped 32% MoM to average US\$16.8/mmbtu. Prices are expected to remain sluggish on the back of a) higher inventory levels in Europe (Currently at 57%), b) restart of US's largest Freeport LNG terminal, c) strong wind power generation, and d) global economic slowdown. However, Chinese import has seen sharp bounce back and economic activity in coming months may have a significant say in LNG prices.

GRMs dipped on margin contraction in gasoline, diesel and Jet-Kero; marketing margin improved sharply

GRM fell by 27% from 6-mth higher points to USD7.2/bbl in Feb'23. Gasoline cracks declined to USD14/bbl from USD15/bbl in Feb'23 while middle distillate cracks like diesel/Jet Kero also dipped to USD21/23 per bbl from USD32/34 per bbl. Naphtha spread however improved a bit to negative USD4/bbl from a negative USD7/bbl. On a marketing side, gross margin on diesel came positive after 12 months and averaged Rs2.1/ltr while petrol margin reduced to Rs7.1 from Rs10.2/ltr in Jan'23.

Petrochemical spreads showed mix-trend in Feb'23

Margins of polymer and fiber intermediates dwindle in Feb'23 on blended input costs. Ethylene and HDPE margin spiked by 92% and 2% respectively in Feb'23, while those of PP/MEG/Px/PTA diminish by 58%/20%/1%/7% respectively, in the same month.

Outlook

Final decision on APM gas price for H1FY24 would be a key catalyst for CGDs and upstream companies. Overall, GAIL would be a major beneficiary of expected tariff hike while lower spot LNG price is expected to benefit CGDs from Q1FY24 in a big way. Overall, we still prefer IGL over CGDs and have BUY with a TP of Rs501. Also, we recently upgraded GAIL to BUY with a new TP of Rs120. We further see a strong over 20% upside in RIL where we have a BUY with a TP of Rs2,825.

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Exhibit 1: Valuation snapshot (Consensus)

Companies	CMP	Mkt Cap	P/E		EV/EBITDA		P/BV (Rs)		RoE (%)	
	(Rs)	(Rs bn)	FY24E	FY25E	FY24E	FY25E	FY24E	FY25E	FY24E	FY25E
Gas Authority of India	110	725	7.6	6.9	5.7	5.0	1.0	1.0	13.6	14.0
Petronet LNG	226	338	10.4	9.2	5.8	5.7	2.1	1.9	20.1	20.9
Gujarat State Petronet	278	157	16.4	13.8	11.3	10.8	1.5	1.4	9.1	10.1
Indraprastha Gas	436	305	16.0	14.7	9.6	8.6	3.2	2.8	20.1	19.3
Mahanagar Gas	990	98	9.5	9.2	4.8	4.4	2.0	1.7	20.5	18.8
Gujarat Gas	508	349	19.5	15.9	12.2	9.7	3.9	3.2	20.2	20.4
Reliance Industries	2,285	15457	22.0	20.0	11.0	10.0	1.8	1.6	8.0	8.0

Source: Bloomberg, Systematix Institutional Research

Exhibit 2: Stock performance over a decade

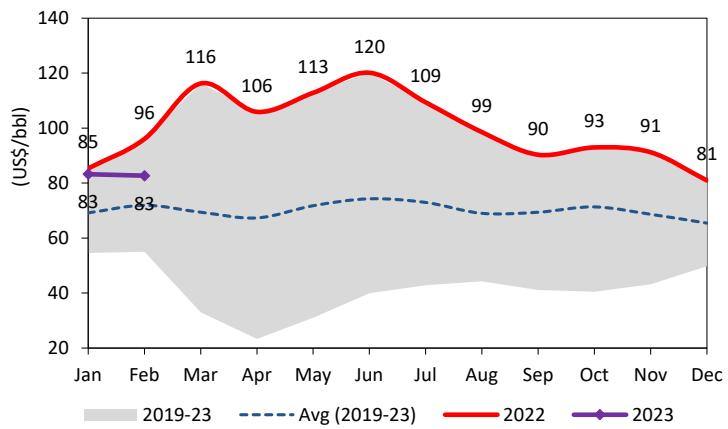
Name	CMP (Rs)	% Price change week	% Price change month	% Price change 3 months	% Price change 6 months	% Price change 1 year	% Price change YTD	% Price change 2 years	% Price change 5 years	% Price change 10 years
Indian Oil	78	(0.5)	(2.1)	0.1	7.7	(5.7)	1.7	15.2	(40.9)	47.0
Bharat Petroleum	323	0.4	(3.7)	(6.8)	(5.4)	(10.9)	(2.4)	(29.5)	(30.3)	141.9
Hindustan Petroleum	228	4.3	(1.3)	(7.2)	(7.0)	(22.4)	(2.9)	(5.4)	(39.2)	237.4
Chennai Petroleum	242	1.7	0.9	11.2	(16.3)	94.8	17.0	116.4	(33.1)	109.3
Mangalore Refinery & Petrochemicals	57	11.2	5.9	(3.3)	(20.9)	29.4	1.2	35.4	(52.3)	8.6
Oil & Natural Gas	156	1.0	5.2	7.9	16.4	(11.3)	6.2	35.4	(13.7)	(26.8)
Oil India	256	(0.4)	6.0	22.9	31.2	8.4	22.7	93.7	12.4	(6.2)
GAIL India	110	4.7	15.1	18.2	19.4	8.5	14.7	12.6	(3.8)	81.8
Petronet LNG	226	1.2	2.3	5.2	6.9	11.3	4.7	(6.8)	(5.3)	207.1
Gujarat State Petronet	278	0.2	4.6	1.3	9.5	3.9	5.4	0.0	44.5	329.9
Indraprastha Gas	436	1.3	0.5	(0.6)	2.3	15.3	5.3	(14.4)	44.7	727.8
Mahanagar Gas	990	9.2	11.0	13.4	12.6	32.0	18.1	(18.0)	(2.6)	135.2
Gujarat Gas	508	(0.3)	4.7	(3.5)	(1.9)	(0.6)	4.4	(2.1)	202.8	292.9
Reliance Industries	2,285	(4.2)	(1.7)	(13.0)	(12.8)	(4.8)	(10.3)	6.9	148.2	446.7
S&P BSE OIL & GAS	17,584	1.6	0.6	(14.5)	(12.5)	(2.9)	(13.8)	10.7	13.6	97.8
NSE Nifty 50 Index	17,188	(2.3)	(3.3)	(7.6)	(4.9)	3.4	(5.1)	14.4	65.1	192.7

Source: Bloomberg

Crude oil prices continue to decelerate

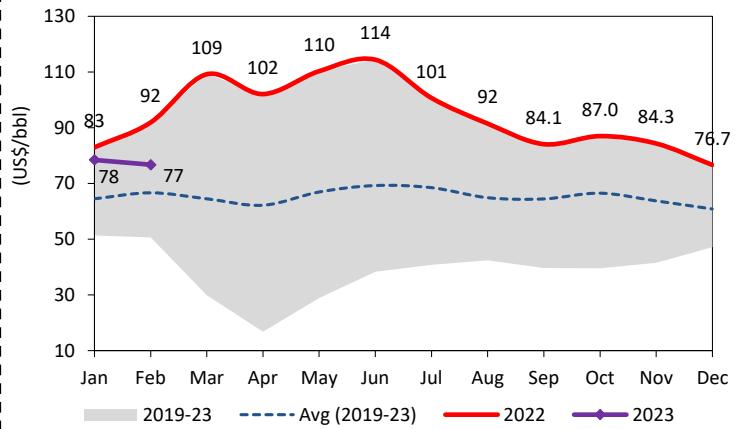
In the month of February 2023, the price of crude oil remains range bound. Crude oil prices were trading in between \$79-\$86/bbl, due to concerns over the slow demand recovery and an increase in oil supply. Towards the end of the month, the prices rebounded slightly as the market sentiment improved, reaching around \$83 per barrel. The fluctuation in crude oil prices during February 2023 was influenced by various factors, including the OPEC+ decision to maintain production cuts, the post COVID-19 pandemic environment, One year passing by of the Russia-Ukraine war, and EU move to cap the natural gas supply from Russia disrupted oil production.

Exhibit 3: Brent price were flattish MoM on recession concerns



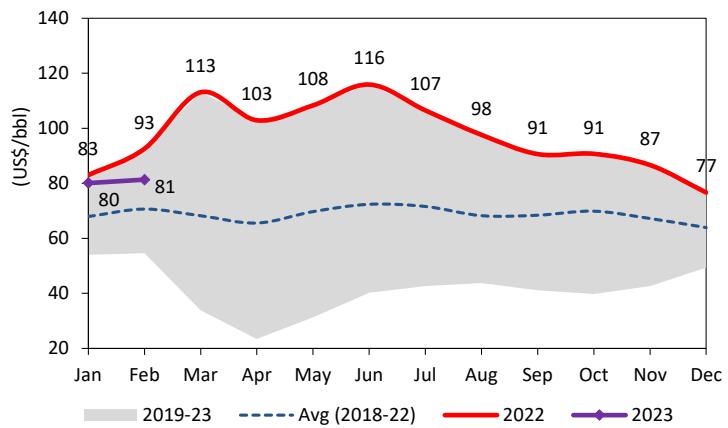
Source: Bloomberg, Systematix Institutional Research

Exhibit 4: WTI oil price decreased by 2.2% MoM to USD 77/bbl



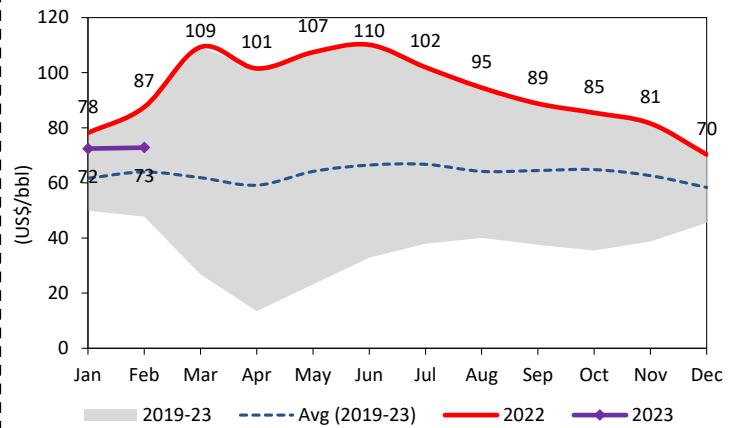
Source: Bloomberg, Systematix Institutional Research

Exhibit 5: Price of Dubai crude oil fell 1.5% MoM to USD 81.3/bbl



Source: Bloomberg, Systematix Institutional Research

Exhibit 6: Maya crude oil price dropped 0.6% MoM to USD 73/bbl

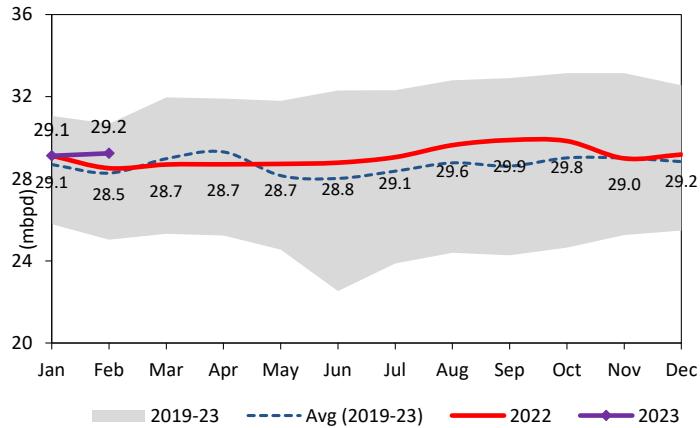


Source: Bloomberg, Systematix Institutional Research

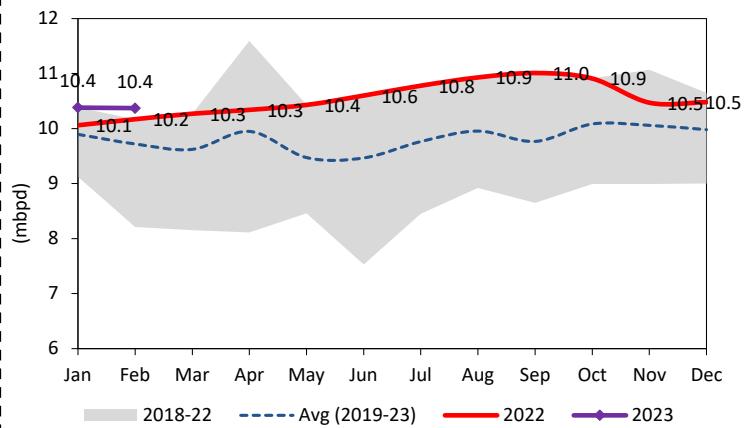
OPEC production rose marginally

OPEC countries increased crude oil production to 29.2mbpd in Feb'23 from 29.1mbpd in Jan'23 on higher production quotas from Nigeria. Albeit OPEC output rises 150,000 bpd from January'23 largely led by 100 kbpds increase in Nigerian output. OPEC has pumped 28.9 million barrels per day in Feb'23 but output is still down more than 700,000 bpd from September'22 levels.

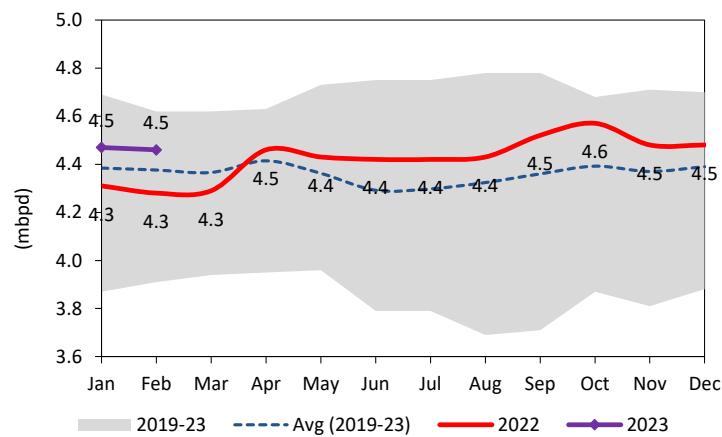
OPEC feels there is no need to increase the production by 500,000 bpd to make up for the Russia's output cut because broad demand increase in China and India has led to shift in imports which is the reason Russian oil import is reduced in the western region due to the sanction imposed on it, but to compensate they have sold more volumes in the Asian markets during this difficult times.

Exhibit 7: OPEC: Crude oil supply rose 0.2mbpd MoM to 29.2mbpd

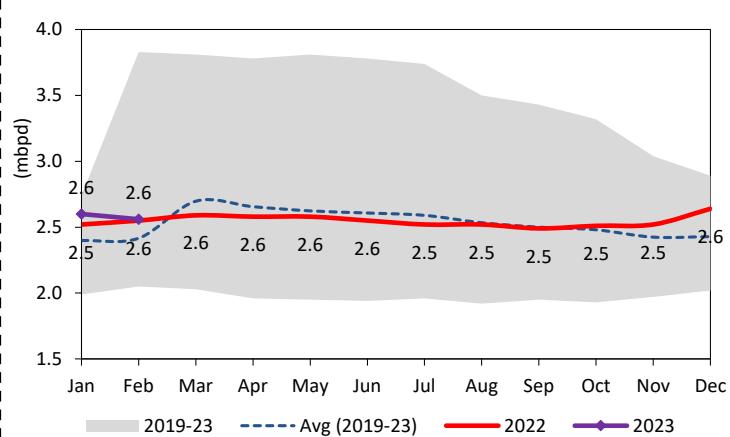
Source: Bloomberg, Systematix Institutional Research

Exhibit 8: Saudi Arabia supply remains at par with last month

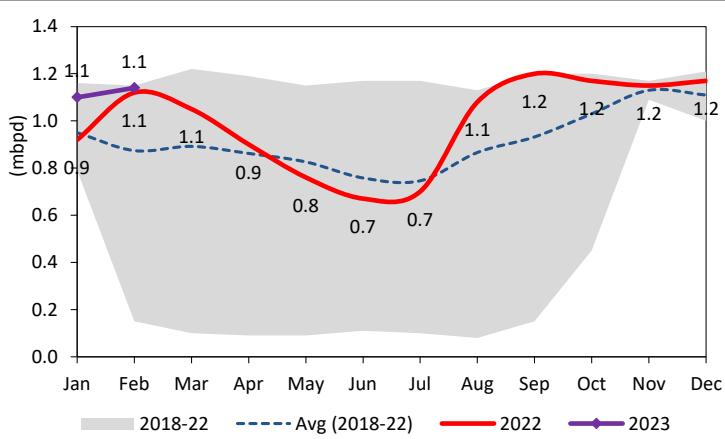
Source: Bloomberg, Systematix Institutional Research

Exhibit 9: Iraq oil production flattish for fourth consecutive month

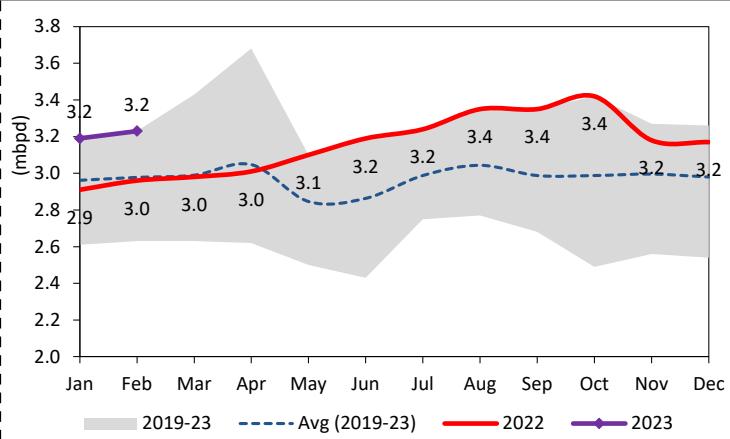
Source: Bloomberg, Systematix Institutional Research

Exhibit 10: Iran oil production declined for the 2nd straight month

Source: Bloomberg, Systematix Institutional Research

Exhibit 11: Libya oil production grew at 4% MoM at 1.14mbpd

Source: Bloomberg, Systematix Institutional Research

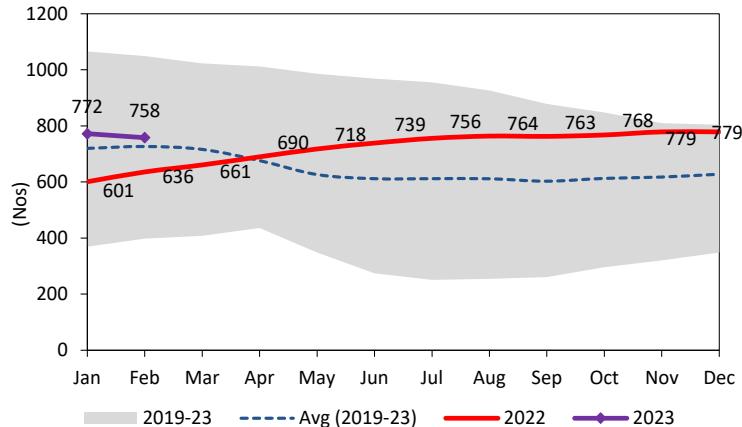
Exhibit 12: UAE oil production was flattish MoM at 3.2mbpd

Source: Bloomberg, Systematix Institutional Research

Light-heavy differential contracted; Oil inventory moved up on lower demand

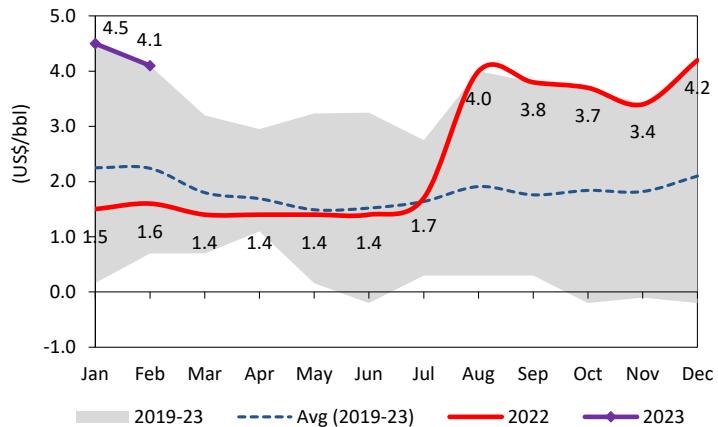
Light-heavy contracted as Arab Light-Arab-Heavy differential dipped 9% MoM to USD 4.1/bbl, while Brent-Dubai differential contracted to USD 1.4/bbl from USD 3.2/bbl a month ago. US crude oil inventory increased from 453mn bbl to 480mn bbl, on higher demand. Also, gasoline inventory increased marginally by 1.6% MoM during Feb'23; the jump in distillate and OECD inventories during Feb'23 indicates a slowdown in industrial activities.

Exhibit 13: US rig count dipped to the first time in last two years



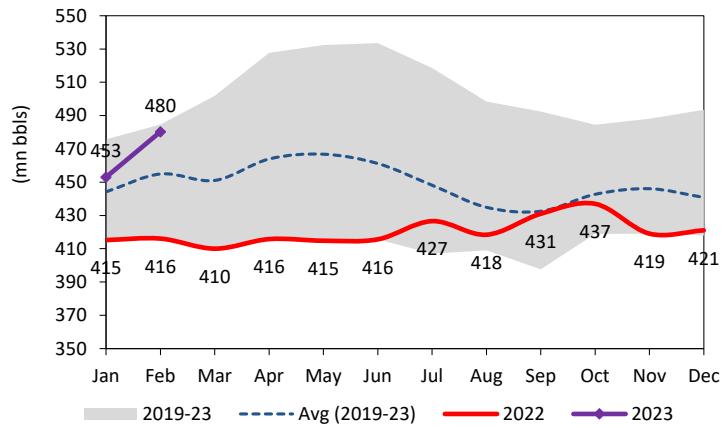
Source: Bloomberg, Systematix Institutional Research

Exhibit 15: Arab Light-Arab Heavy declines by 9% MoM



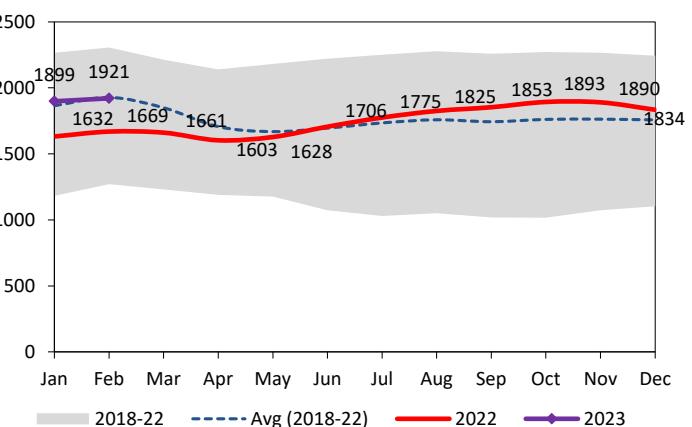
Source: Bloomberg, Systematix Institutional Research

Exhibit 17: US crude oil inventory was up 6% on lower demand



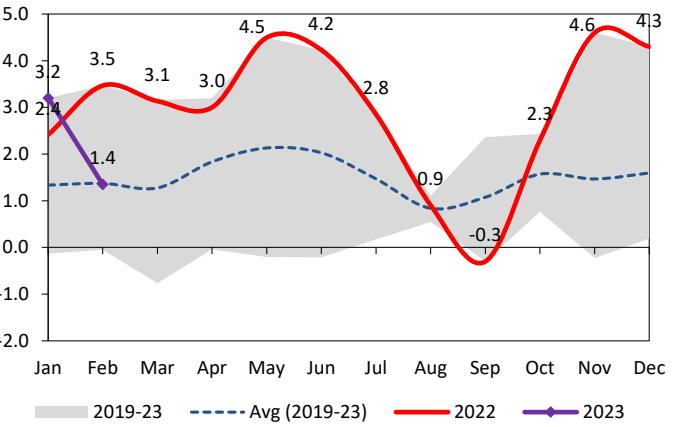
Source: Bloomberg, Systematix Institutional Research

Exhibit 14: Global rig count though has shown improvement



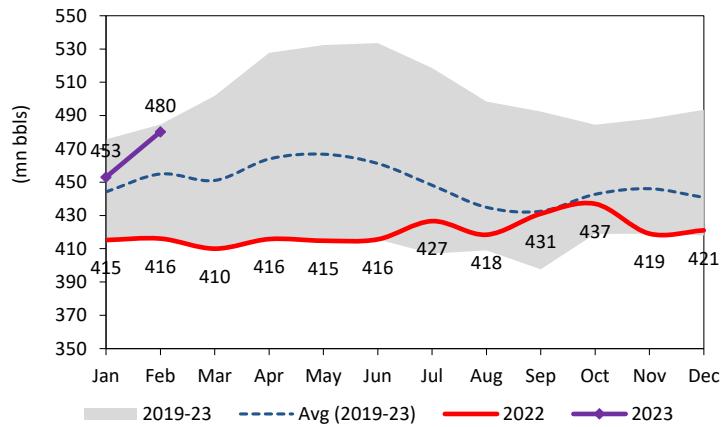
Source: Bloomberg, Systematix Institutional Research

Exhibit 16: Brent-Dubai differential nosedived by 58%



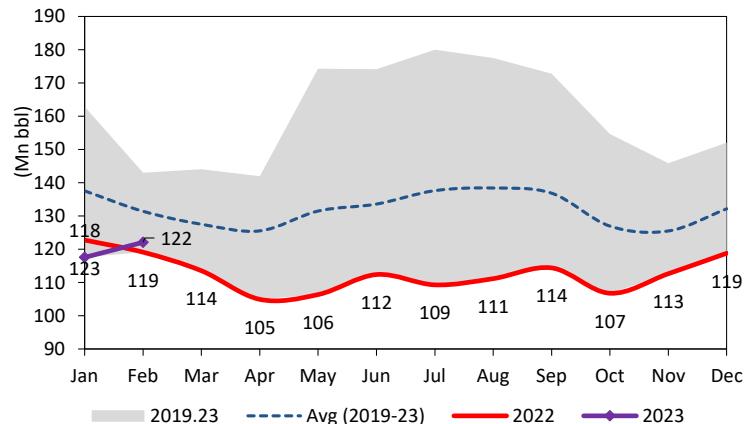
Source: Bloomberg, Systematix Institutional Research

Exhibit 18: US gasoline inventory was up 1.6% MoM



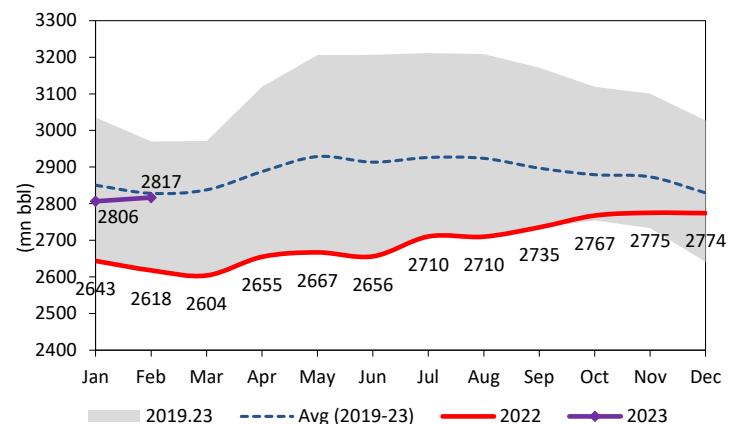
Source: Bloomberg, Systematix Institutional Research

Exhibit 19: US distillates inventory up 3.4% MoM to 122mn bbl



Source: Bloomberg, Systematix Institutional Research

Exhibit 20: OECD crude oil inventory increased by 0.4% MoM

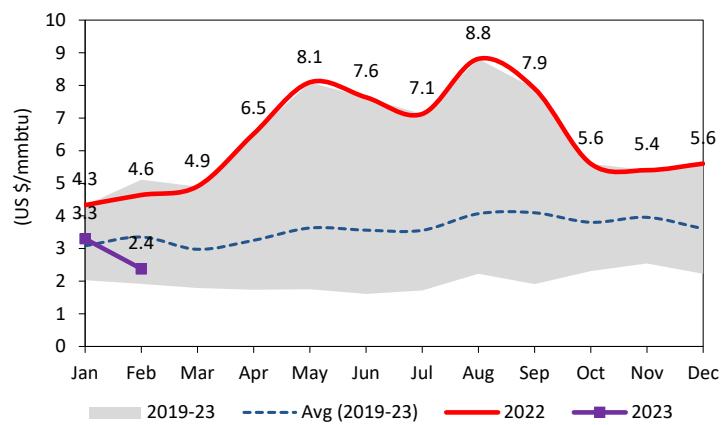


Source: Bloomberg, Systematix Institutional Research

LNG price fell on mild winter and high inventory levels

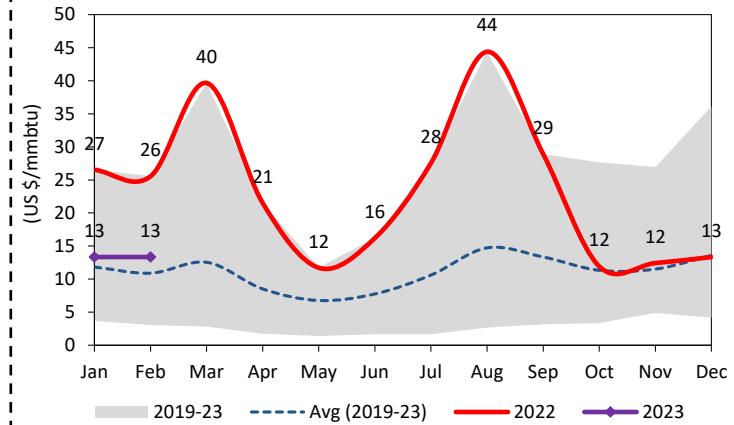
Asian spot LNG prices continued their downtrend this week, hitting the lowest level since July 2021, due to tepid demand growth and higher inventory levels. During Feb'23, Japan Korea LNG marker price dipped 32% MoM to average US\$16.8/mmbtu. Prices are expected to remain sluggish on the back of a) higher inventory levels in Europe (Currently at 57%), b) restart of US's largest Freeport LNG terminal, c) strong wind power generation, and d) global economic slowdown. However, Chinese import has seen sharp bounce back and economic activity in coming months may have a significant say in LNG prices. Except China, volume from other Asian countries remained lower in coming months which we expect to reverse from Mar'23 on the back of prevailing affordable prices.

Exhibit 21: Henry-Hub gas price slips by 28%



Source: Bloomberg, Systematix Institutional Research

Exhibit 22: NBP price remains flattish for last three months



Source: Bloomberg, Systematix Institutional Research

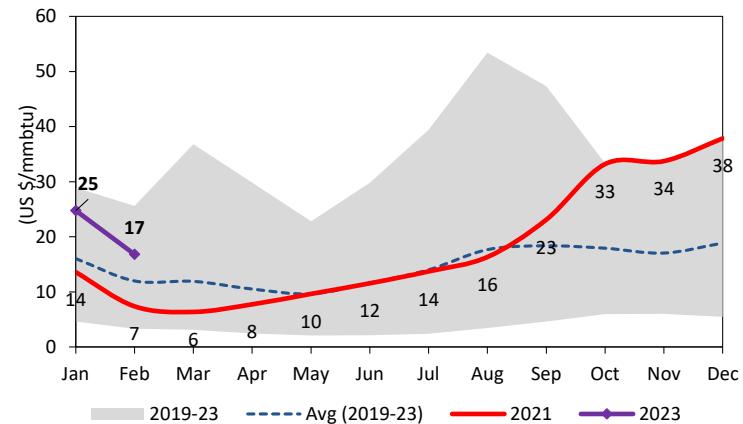
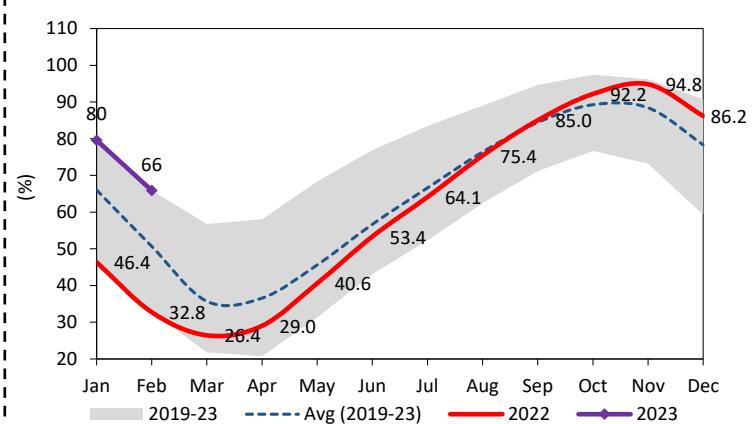
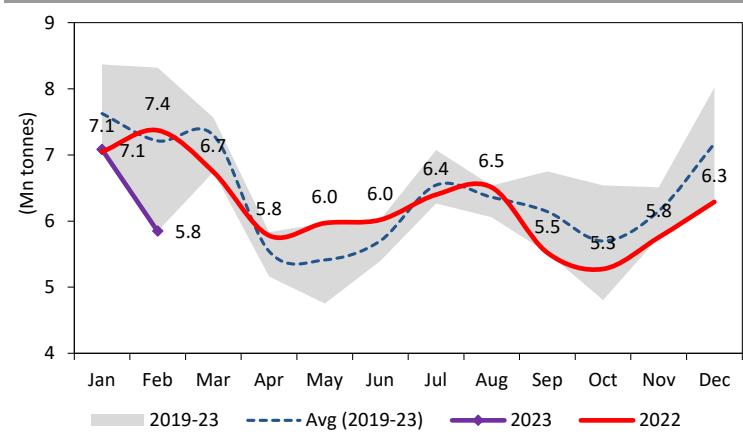
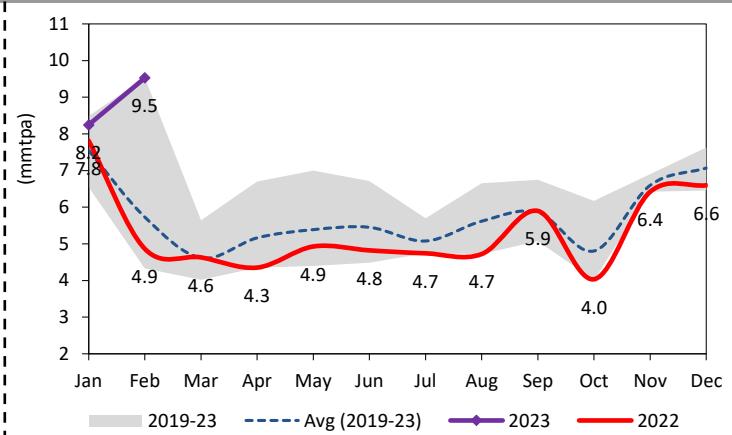
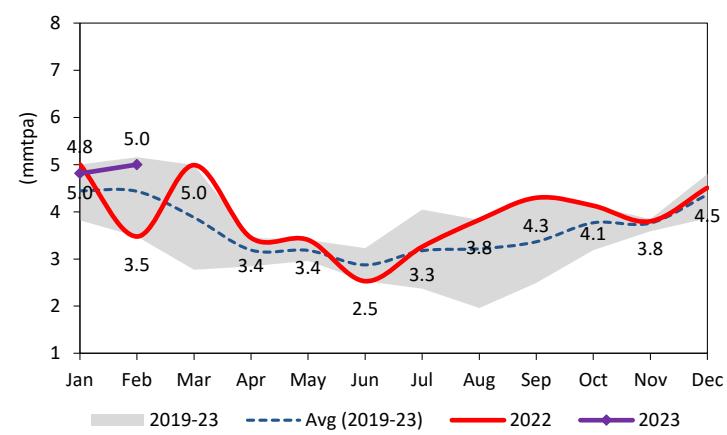
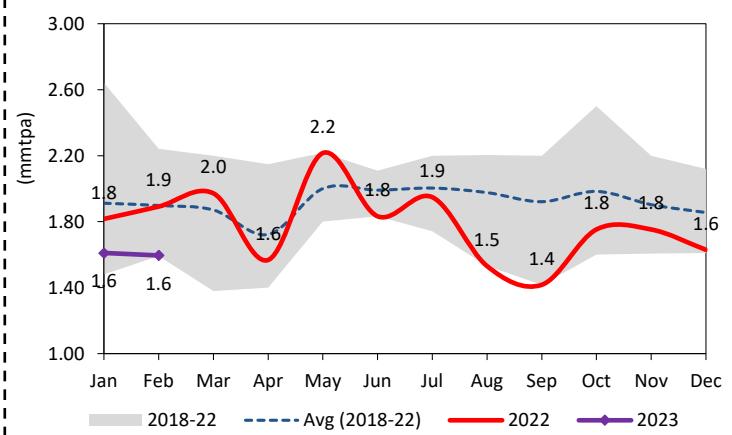
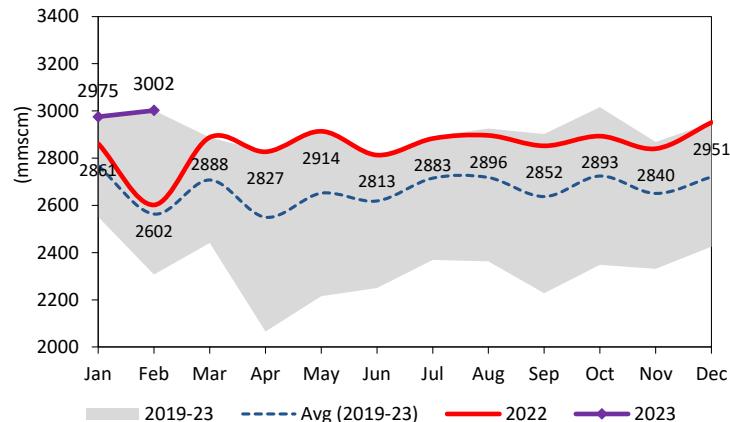
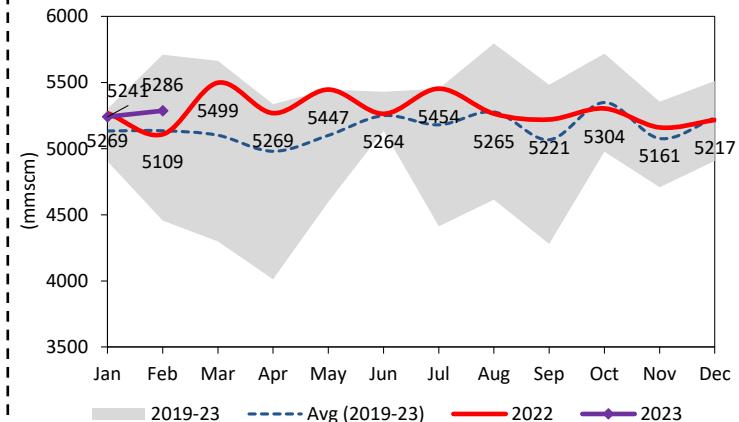
Exhibit 23: Japan Korea LNG price dipped 32% MoM at \$16.8/mmbtu**Exhibit 24: Europe gas storage declines 17% vs 8% in Jan'23****Exhibit 25: Japan LNG imports decline 17% MoM****Exhibit 26: China LNG import volumes up 15% led by reopening****Exhibit 27: Korea LNG imports remain flattish****Exhibit 28: India LNG import shows horizontal trend**

Exhibit 29: Domestic gas production highest since Oct'21

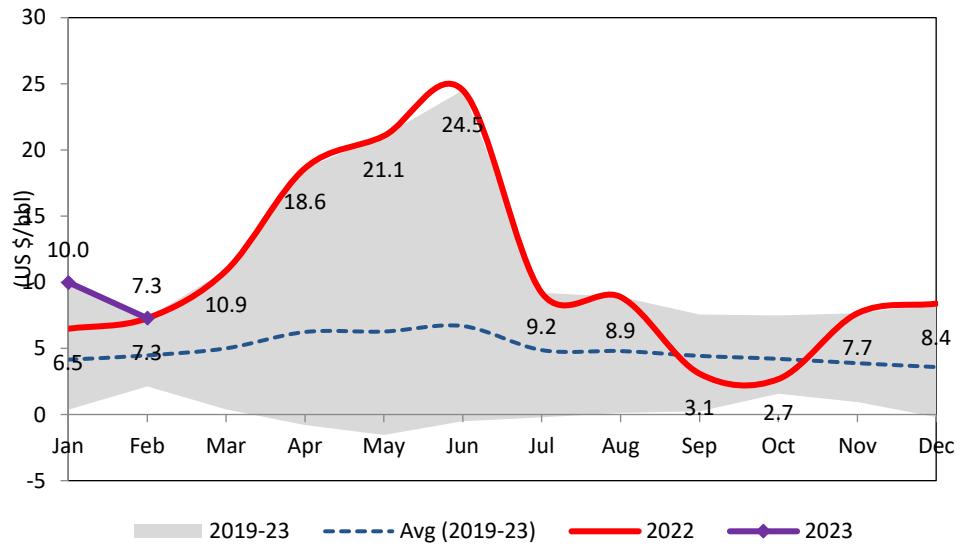
Source: Bloomberg, Systematix Institutional Research

Exhibit 30: Domestic gas consumption was marginally upside

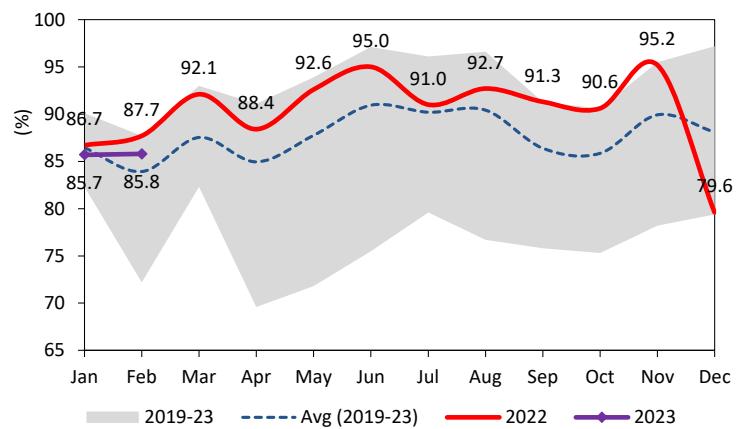
Source: PPAC, Systematix Institutional Research

GRM back in black on lower cracks across products, except for naphtha

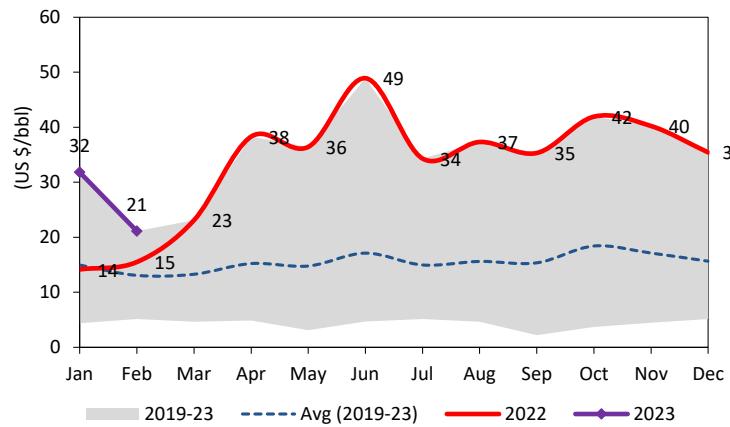
GRM in Jan'23 was at USD10/bbl which was at a 6 months high point, it fell by 27% to USD7.2/bbl in Feb'23. Gasoline cracks declined to USD14/bbl from USD15/bbl in Feb'23. Middle distillate cracks like diesel and Jet Kero also dipped in Feb'23 to USD21/bbl and USD 23/bbl from USD32/bbl and USD34/bbl, respectively. Naphtha spread however improved a bit to negative USD4/bbl from a negative USD7/bbl. Higher gas price and lower supply from Russia continue to keep diesel cracks higher.

Exhibit 31: GRM dipped 27% on margin contraction across products

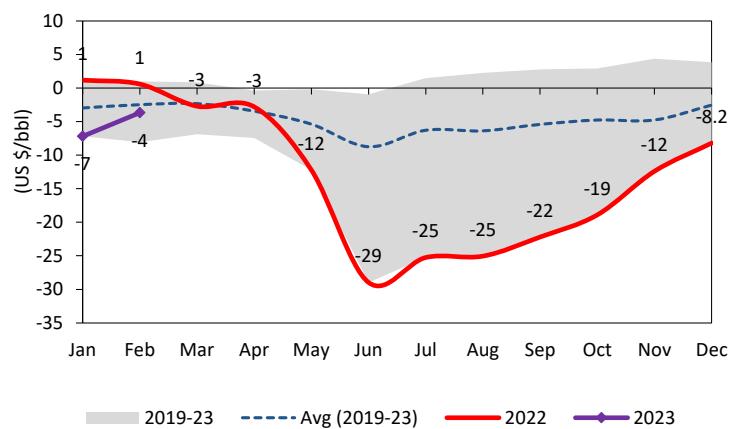
Source: Bloomberg, Systematix Institutional Research

Exhibit 32: US refinery utilisation down to 86%

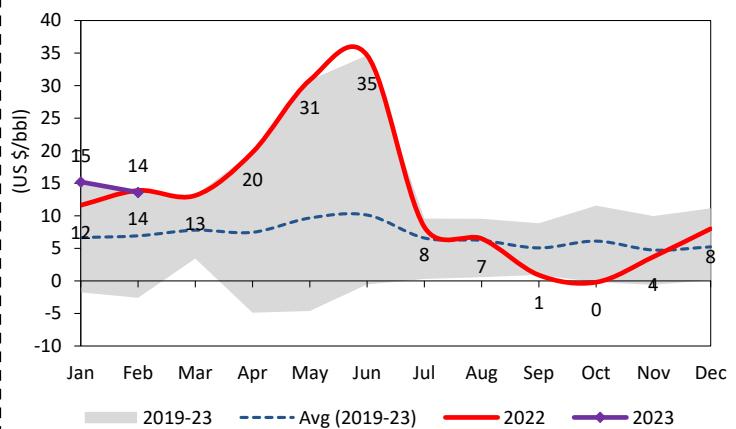
Source: Bloomberg, Systematix Institutional Research

Exhibit 34: Gasoil crack spread also declined by 34%

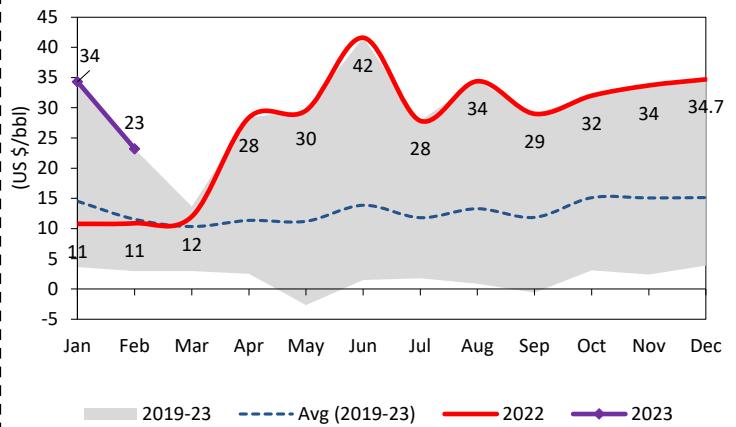
Source: Bloomberg, Systematix Institutional Research

Exhibit 36: Naphtha spread improved on higher petchem demand

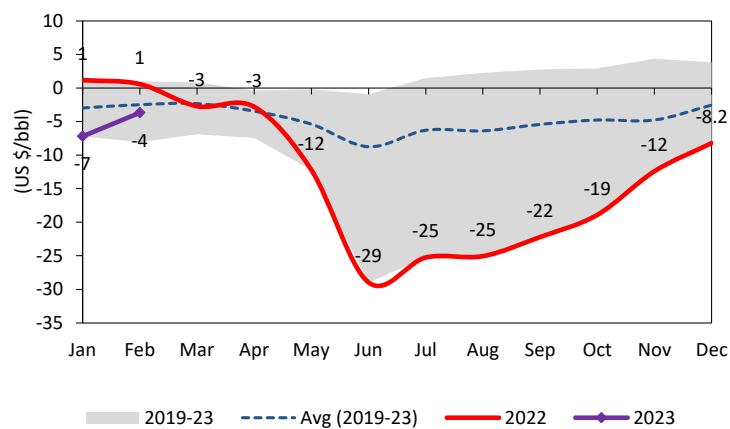
Source: Bloomberg, Systematix Institutional Research

Exhibit 33: Gasoline crack spread declines by 12% and now at \$14/bbl

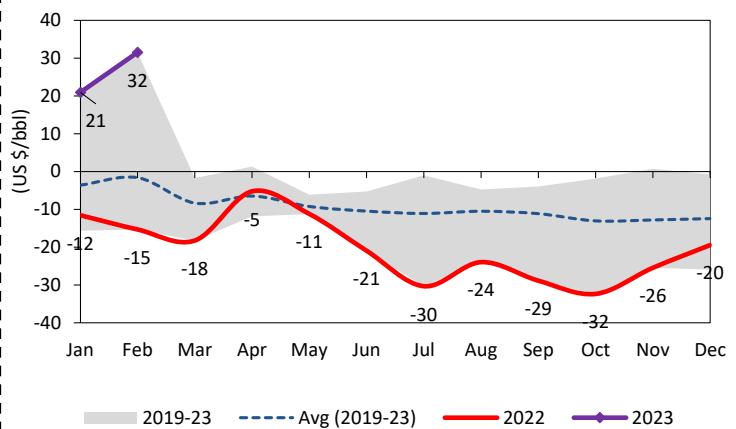
Source: Bloomberg, Systematix Institutional Research

Exhibit 35: Jet-Kero crack spread dipped 32% MoM to USD 23/bbl

Source: Bloomberg, Systematix Institutional Research

Exhibit 36: Naphtha spread improved on higher petchem demand

Source: Bloomberg, Systematix Institutional Research

Exhibit 37: Fuel oil crack jumped 50% MoM on improved gas prices

Source: Bloomberg, Systematix Institutional Research

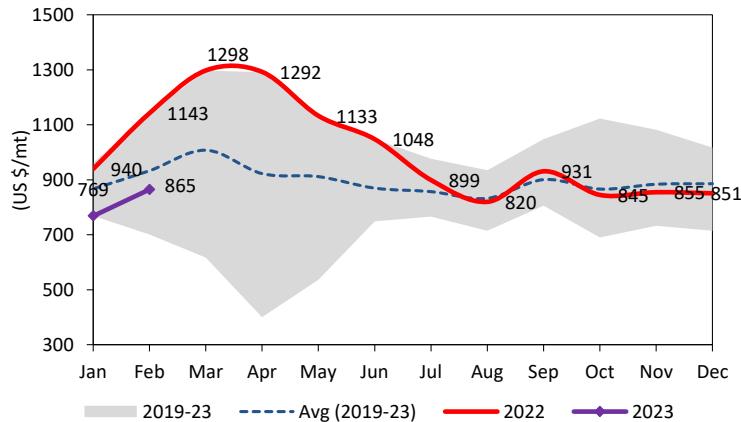
Petrochemical spreads were mix during Feb'23

Right now, we are witnessing a global shift in the petrochemical industry, resulting in addition of base chemical capacities. India ranks 6th amongst the top 10 largest manufacturers of petrochemical-based products in the world. Around 30% of the raw material in the chemical industry is made from the petrochemical industry, and it is

expected that by 2025 the petrochemical industry will reach new heights as in 2021, it had reached USD100 billion with a CAGR of 14%.

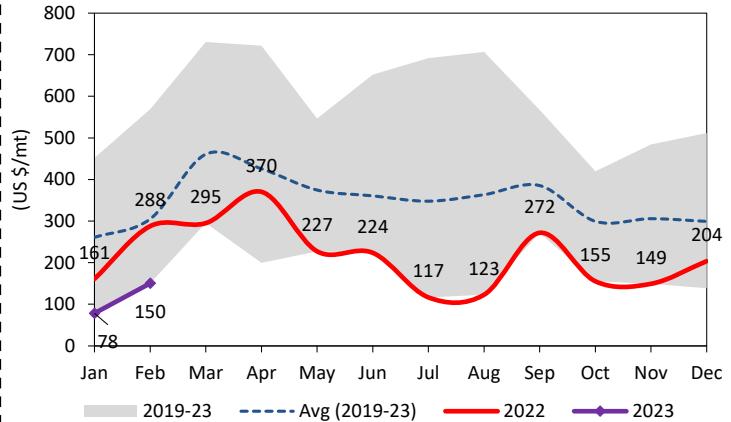
Margins of polymer and fiber intermediates dwindle in Feb'23 on blended input costs. Ethylene and HDPE margin spiked by 92% and 2% respectively in Feb'23, while those of PP/MEG/Px/PTA diminish by 58%/20%/1%/7% respectively, in the same month.

Exhibit 38: Ethylene price reversed its trend, having risen by 13%



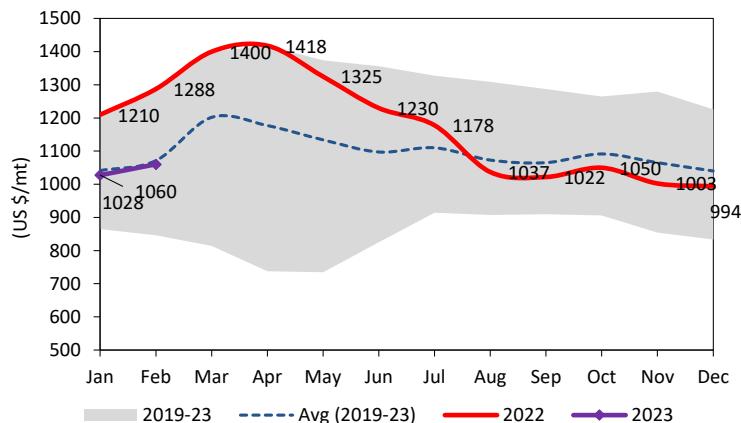
Source: Bloomberg, Systematix Institutional Research

Exhibit 39: Ethylene-Naphtha spread improved sharply by 92%



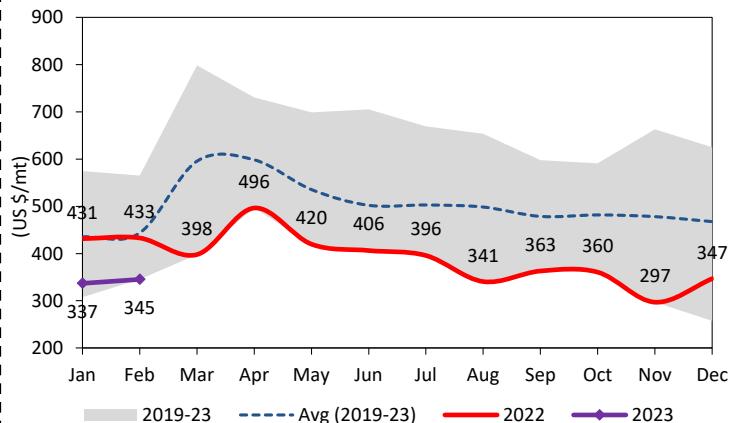
Source: Bloomberg, Systematix Institutional Research

Exhibit 40: HDPE price saw some marginal increase



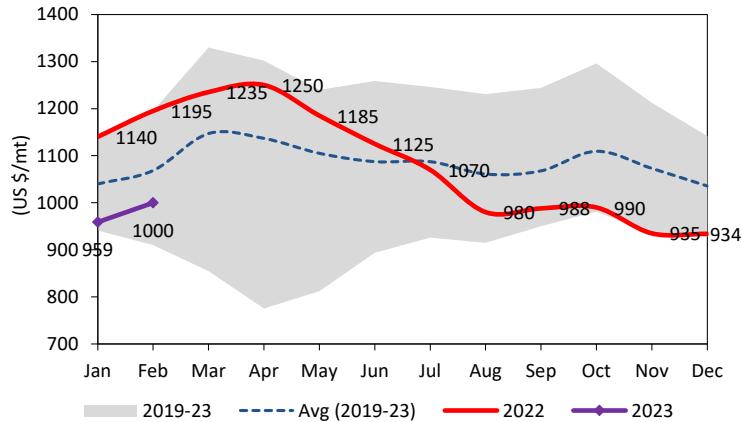
Source: Bloomberg, Systematix Institutional Research

Exhibit 41: HDPE-Naphtha spread improving from lower levels



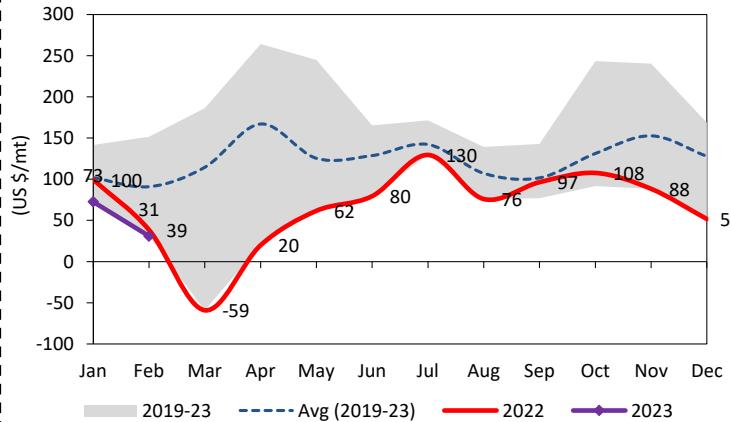
Source: Bloomberg, Systematix Institutional Research

Exhibit 42: PP price rise 4% MoM on better demand from China

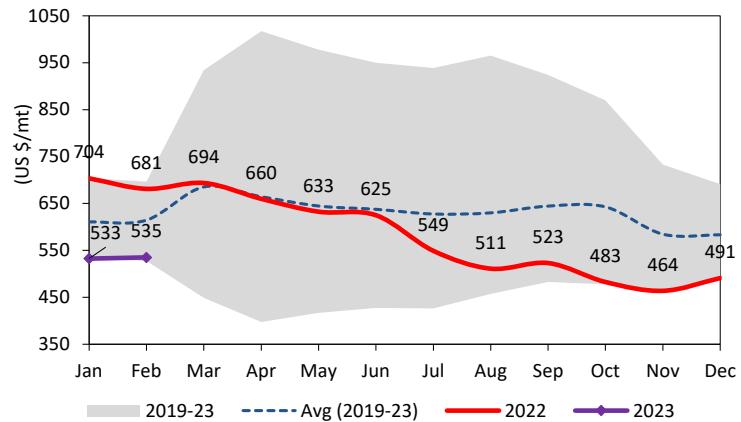
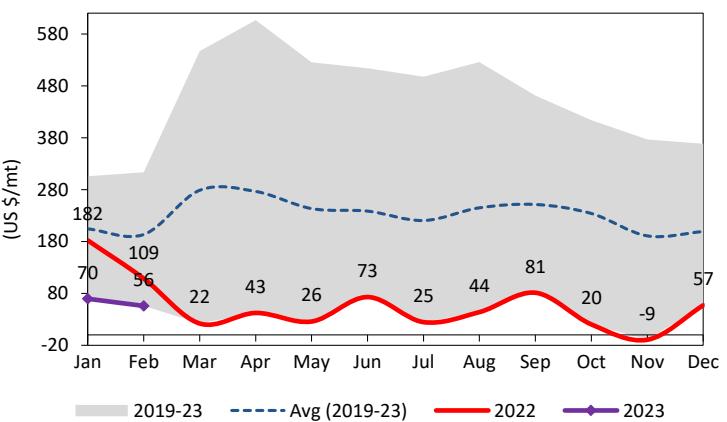
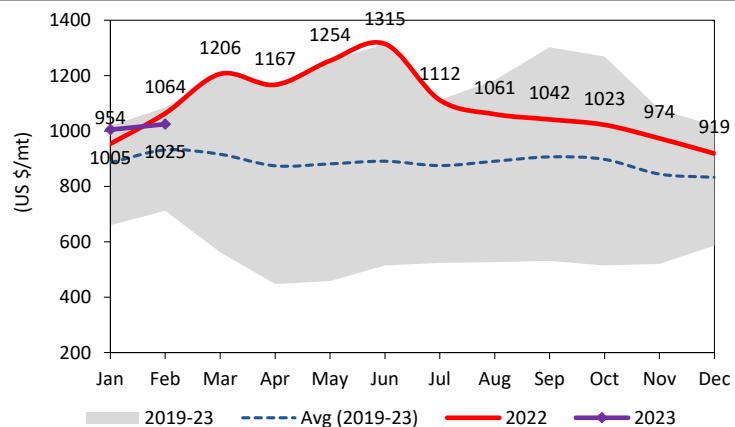
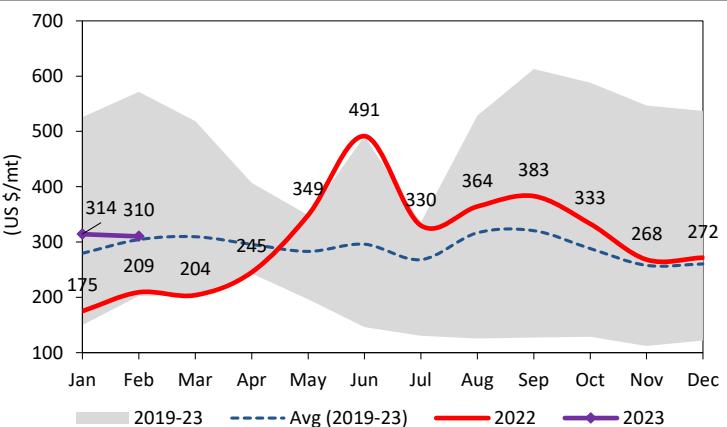
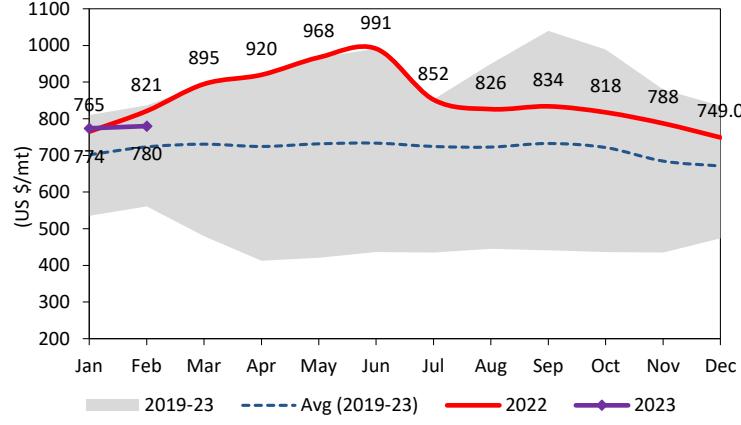
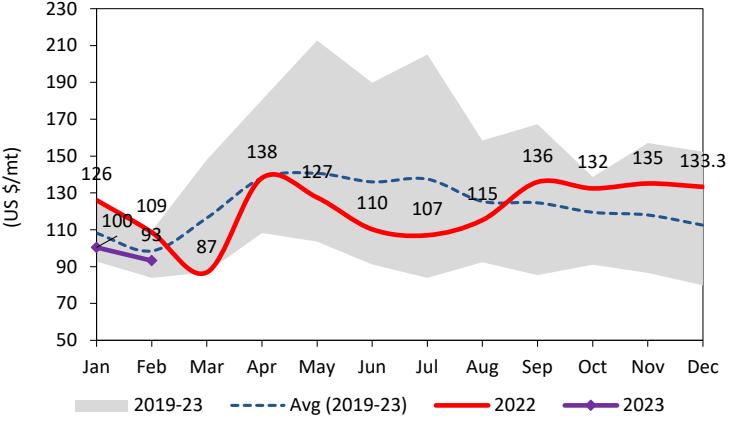


Source: Bloomberg, Systematix Institutional Research

Exhibit 43: PP-P spread fell again in Feb'23 post uptick last 3 mnths

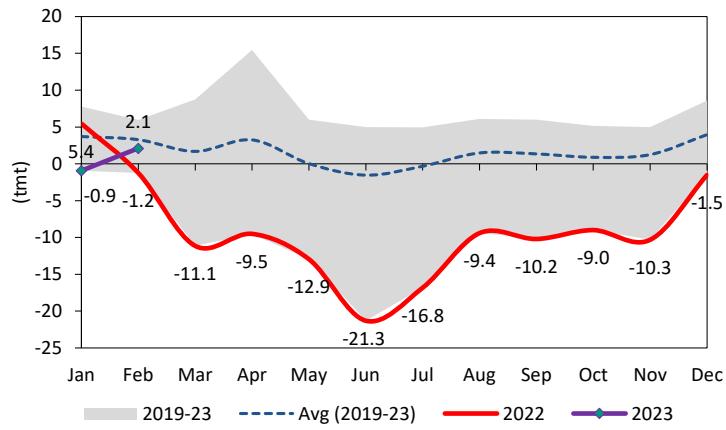


Source: Bloomberg, Systematix Institutional Research

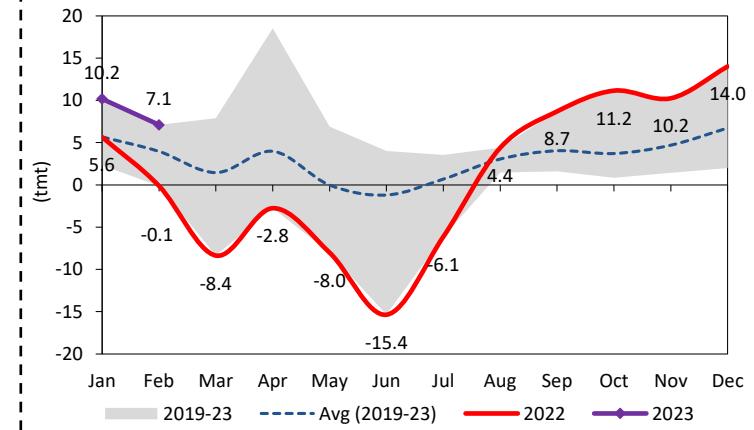
Exhibit 44: MEG price remains stable MoM**Exhibit 45: MEG-Naphtha spread declined by 20% MoM****Exhibit 46: Px price improved by 1.9% MoM to USD 1,025/mt****Exhibit 47: Px-Naphtha spread at USD 310/mt, rose by 1.3% MoM****Exhibit 48: PTA price at USD 780/mt, continues to be under pressure****Exhibit 49: PTA-Px spread declined 7.1% MoM to USD 93/mt****Marketing gain on diesel outpaced reduced profit from petrol**

Oil marketing firms are now profitable again from selling fuel led by sharp drop in gasoil prices in international market. Diesel marketing turned positive after a long time, currently at Rs2.1/ltr. At the same time, the average profit from petrol fell by 31% MoM to Rs 7.1/ltr. At current prices, profit from petrol and diesel stands at Rs8/4 per litre, which is significant positive for OMCs. We expect diesel margin to

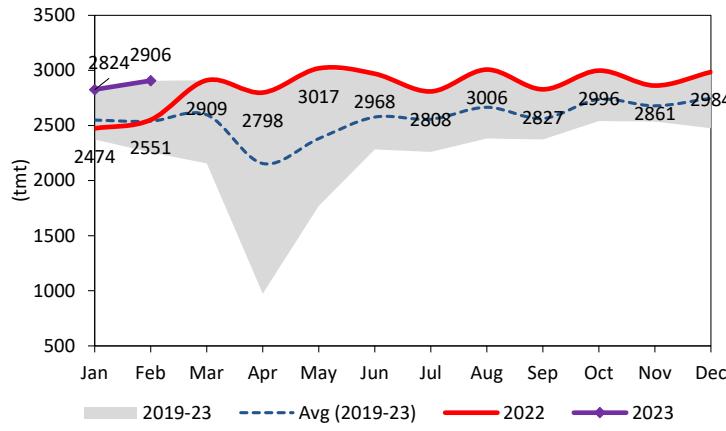
improve further in coming months as concern of global slowdown amid better supply environment are expected to bring down the diesel prices.

Exhibit 50: Diesel gross marketing turned positive to Rs 2.1/ltr


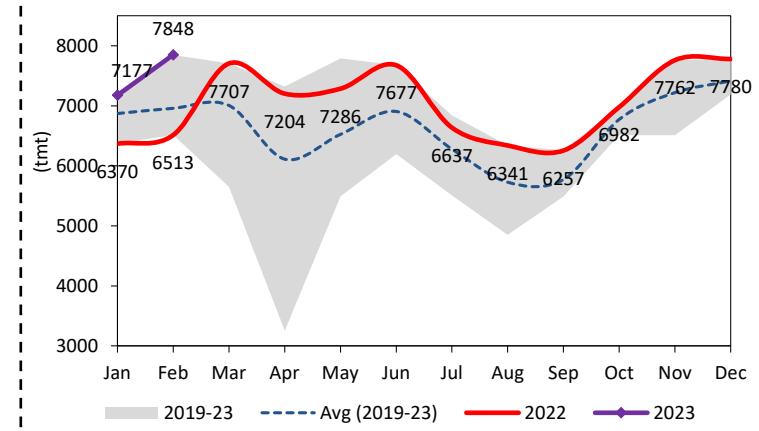
Source: PPAC, Systematix Institutional Research

Exhibit 51: Petrol gross marketing declined to Rs 7.1/ltr


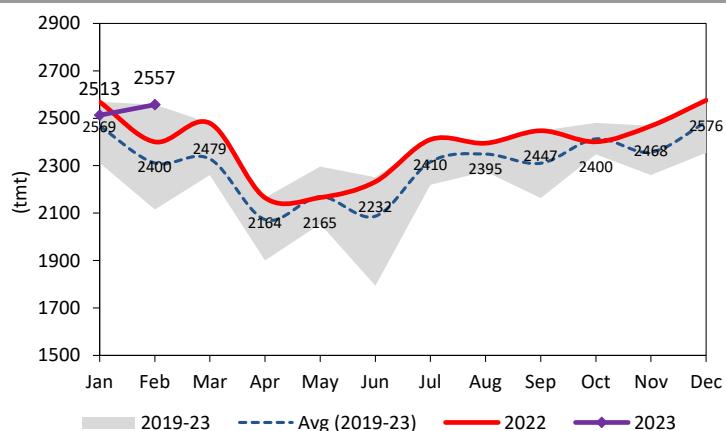
Source: PPAC, Systematix Institutional Research

Exhibit 52: Gasoline consumption volumes grew 3% MoM to 3mmt


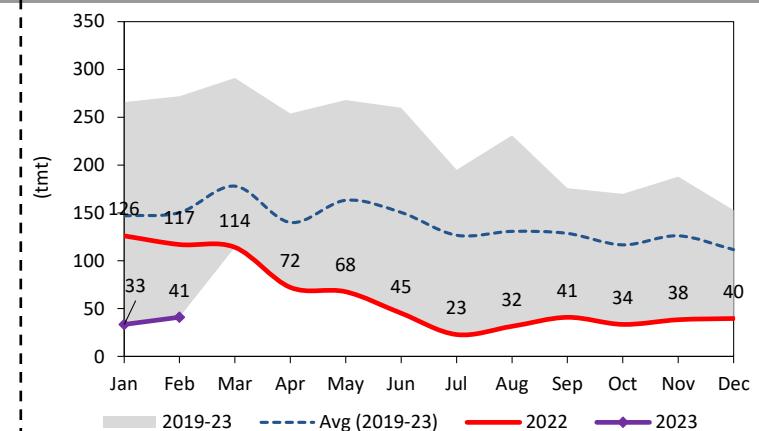
Source: PPAC, Systematix Institutional Research

Exhibit 53: Gasoil consumption volumes grew by 7.7% MoM


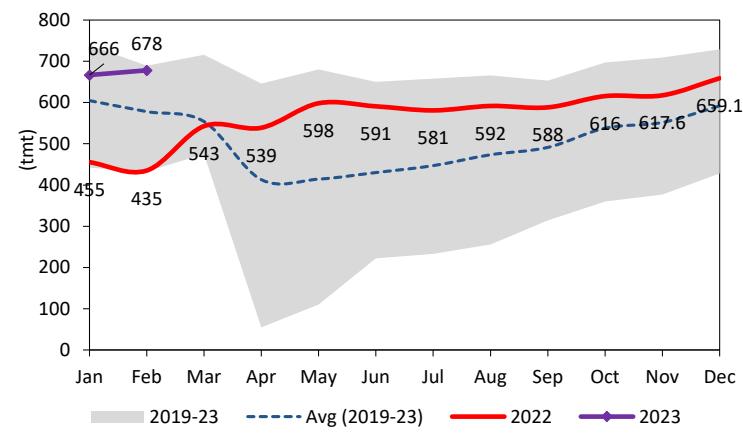
Source: PPAC, Systematix Institutional Research

Exhibit 54: LPG consumption rise marginally 1.7% MoM to 2.6mmt


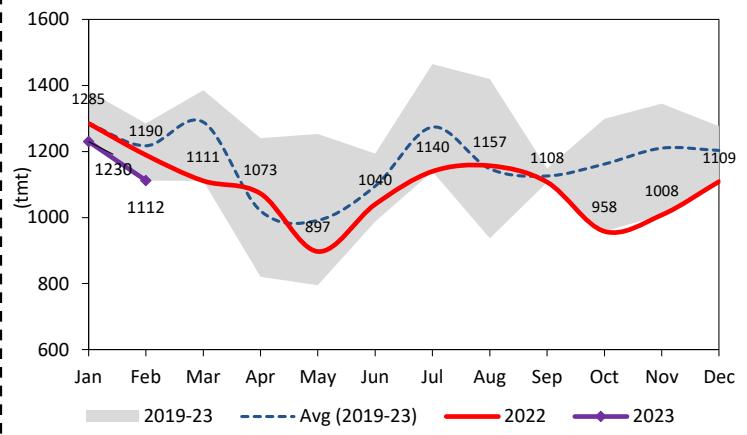
Source: PPAC, Systematix Institutional Research

Exhibit 55: Kerosene demand up by 23% but at lower end of the curve


Source: PPAC, Systematix Institutional Research

Exhibit 56: ATF consumption volumes up 1.7% MoM to 678tmt

Source: PPAC, Systematix Institutional Research

Exhibit 57: Naphtha consumption volumes down by 9.5% MoM

Source: PPAC, Systematix Institutional Research

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