

Special Report

LPG market recovery: Seasonal or structural?

Key Takeaway

Global LPG exports in the first ten months of the year have surpassed 2019 pre-Covid levels, with the growth dominated by the US

The Panama Canal congestion is an area that we are closely monitoring. As traffic through the canal rises seasonally, rising waiting times are driving up VLGC utilisation on the USGC-to-East Asia route, and in turn shoving up tanker rates globally

In Europe, LPG imports have risen in recent months, with refineries supplying less domestically and industries switching away from natural gas amid high prices. The recent crash in gas hub prices has slowed this trend but it is expected to pick up again as winter arrives.

The Middle East has seen a rise in its LPG production this year a result of higher crude production. Increased exports from the region has not been met by lacklustre demand from Asia's petrochemical sector, weighing on LPG prices

A nascent recovery in China's PDH margins, pre-winter stock-building in Japan and South Korea as well as festive season in India has seen an uptick in LPG imports into Asia last month, with further upsides expected in the remaining of this quarter

This presentation has been compiled under the guidance of



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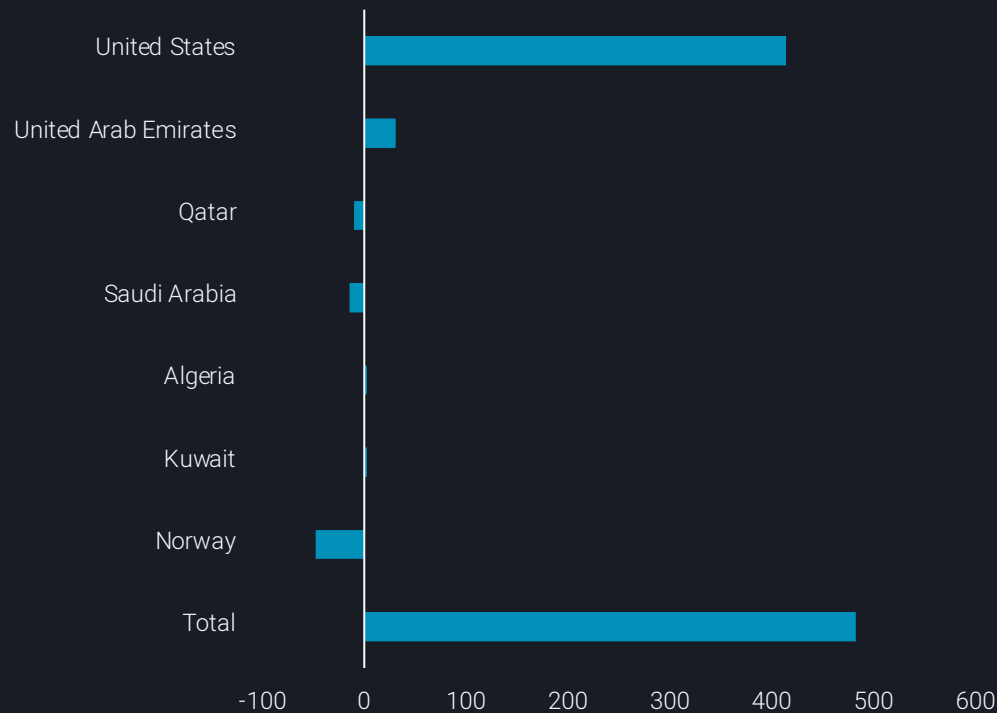


Dylan Simpson

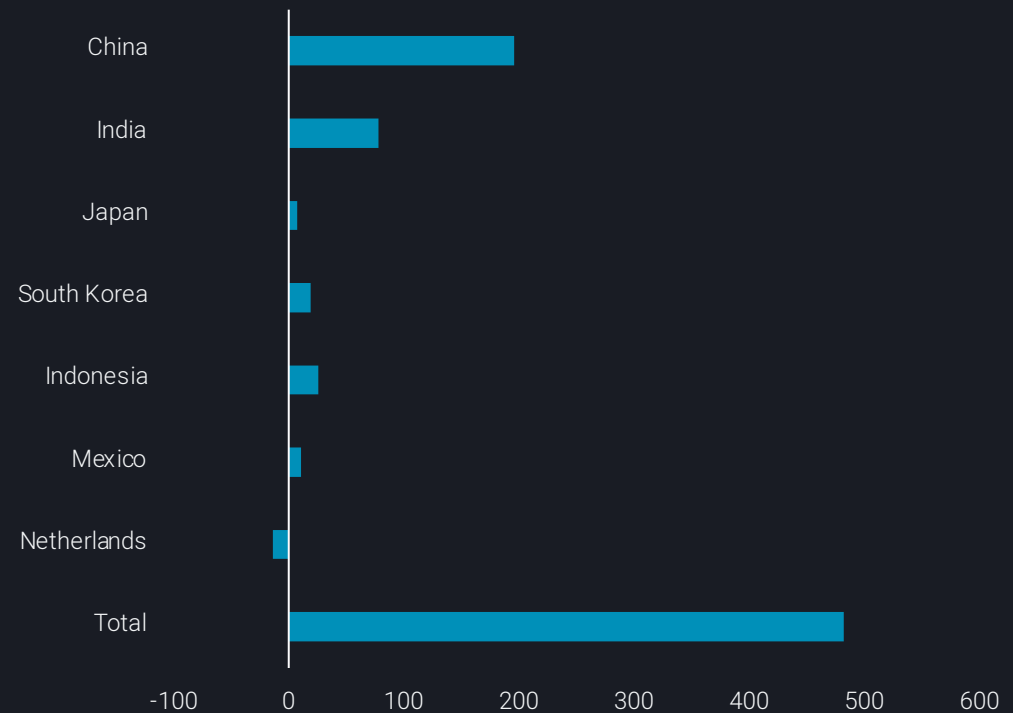
Junior Freight Analyst

US dominates global exports growth, while China and India account for over 50% increase in world's imports

Jan - Oct 2022 vs 2019 average LPG exports by top origin countries (kbd)



Jan - Oct 2022 vs 2019 average LPG imports by top destination countries (kbd)



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US LPG exports to Asia firm, but rising Panama Canal waiting time may curb arbitrage

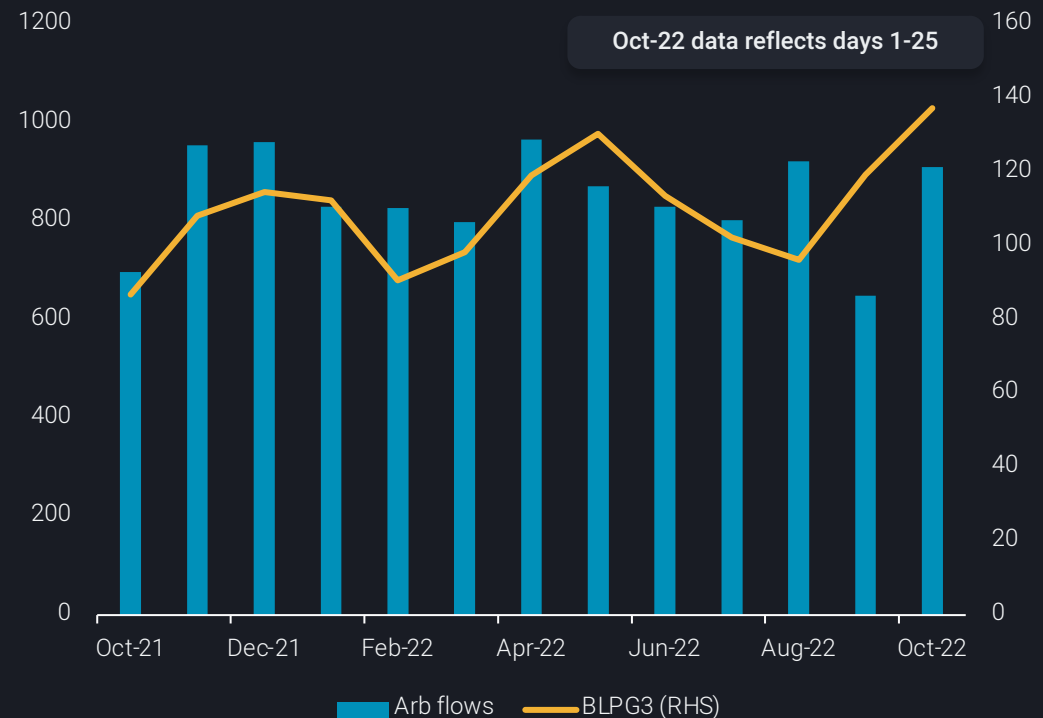
An open arb has seen US LPG exports to Asia rebounding in October, with flows rebounding to 880kbd, up over 40% m-o-m. Compared to the same period last year, volumes are also 30% higher

- An expected colder-than-average winter in East Asia due to the La Nina weather pattern is drumming up pre-winter stock build

Rising waiting time at the Panama Canal could limit upsides on US LPG exports to Asia. Longer waiting times are reducing availability of LPG tankers and driving rates up

- BLP3 USG-to-Japan VLGC rates have risen by over 15% from August to October, as tanker utilisation rates increase
- Transit waiting time for Neopanamax vessels have risen to 16 and 21 days for Northbound and Southbound vessels respectively, up from 12 and 15 days last week
- Transit waiting time is expected to increase as traffic rises seasonally in the coming weeks

US LPG exports to Asia (mbd, LHS) and BLP3 USG-to-Japan VLGC tanker rates (\$/t, RHS)



Get live data on platform ([Arb flow](#), [BLP3 rates](#))

Panama canal congestion supports VLGC rates ex-US Gulf

[LPG tonne-miles](#) out of the US Gulf have increased in October, eating into the tonne-mile share of LPG coming out of the Middle East

- Vessels originating in the US Gulf are headed towards East and Southeast Asia, seeking the shorter route via Panama Canal

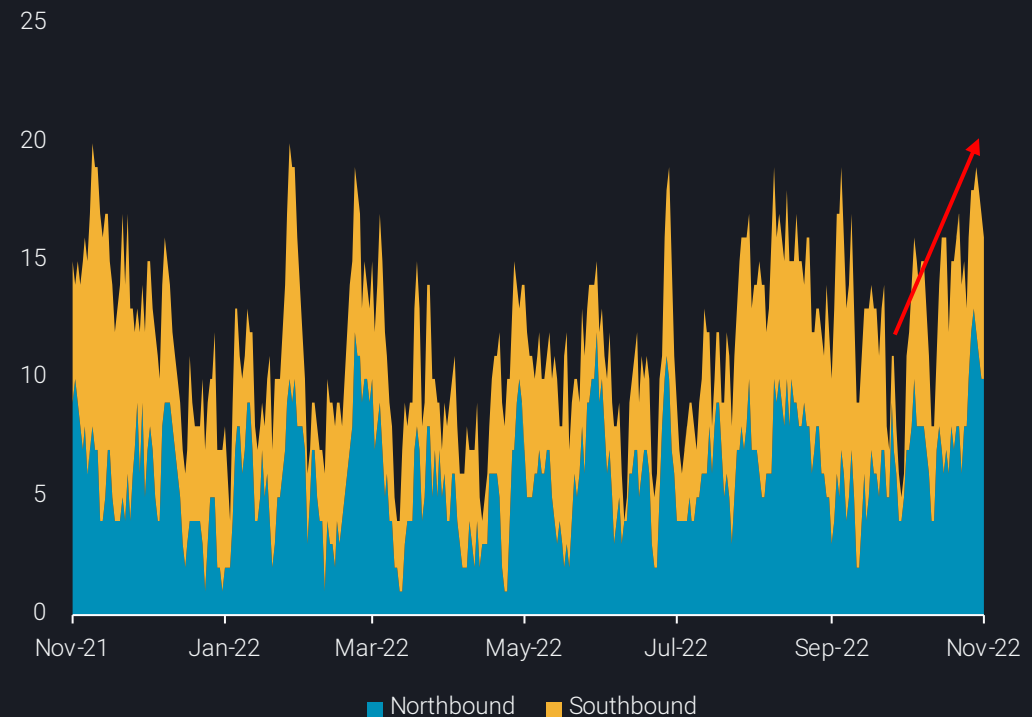
On the supply side, congestion near the Panama Canal has started building up, limiting [VLGC availability](#) in the US Gulf

- Coupled with high demand in East Asia as winter approaches, has seen VLGC freight rates out of the US Gulf to East Asia ([BLPG3](#)) surge 30% in the last week

The arbitrage window is still open for propane and butane between the US Gulf and East Asia, which could see continued strength in flows, especially with a cold winter expected in East Asia

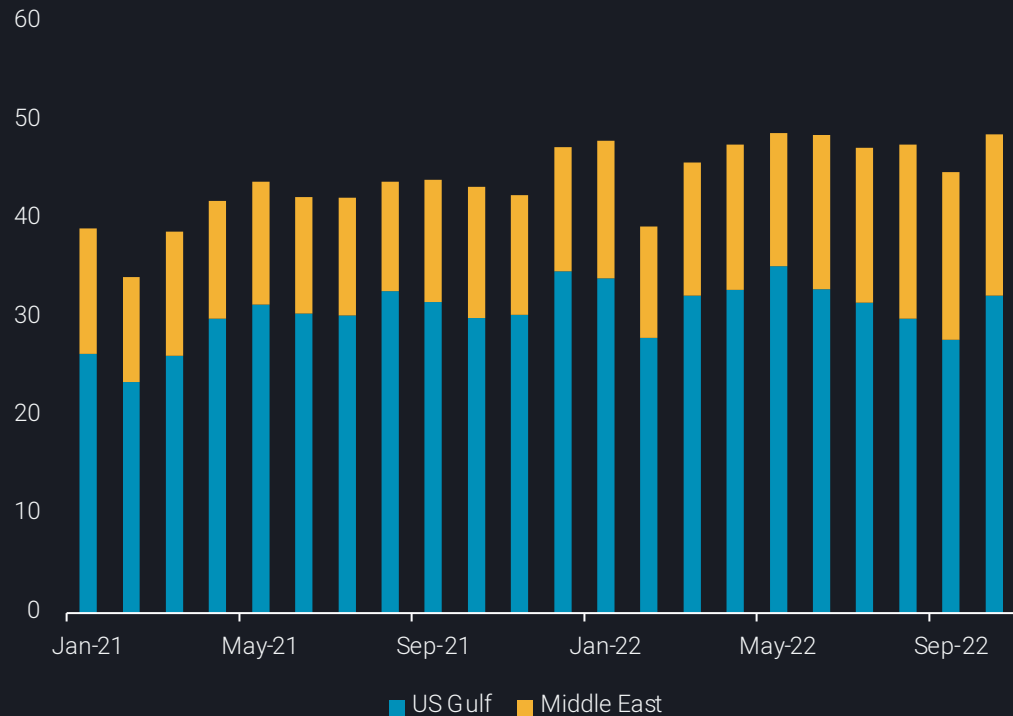
- This could exacerbate congestion in the Panama Canal and limit vessel availability, further supporting LPG freight rates

VLGCs waiting outside or currently transiting the Panama Canal (no. of vessels)

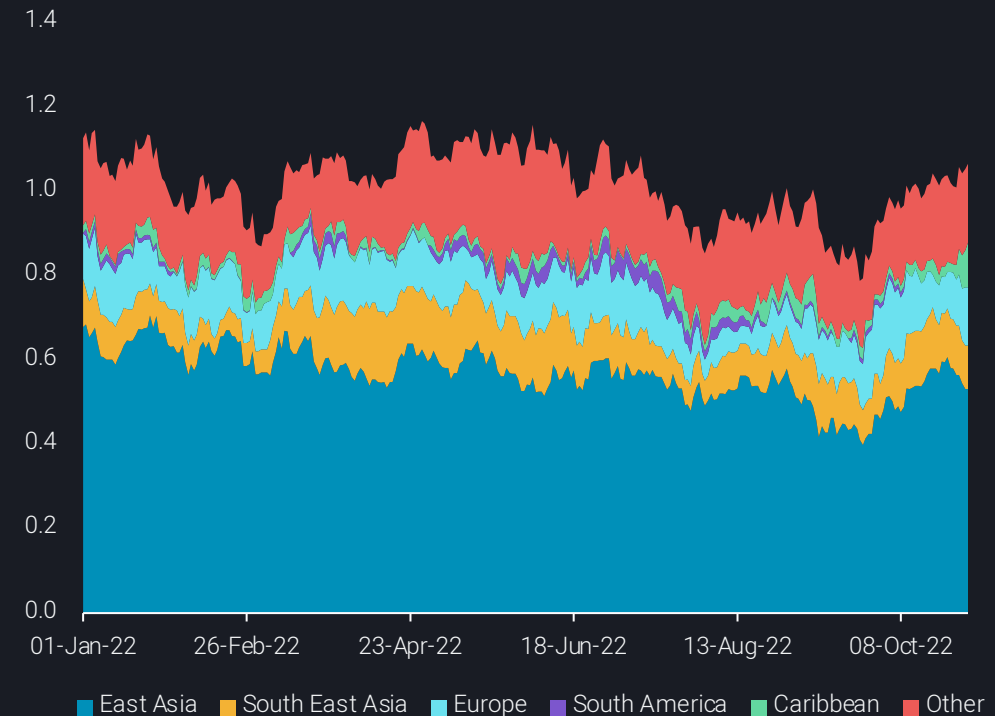


US Gulf gains LPG tonne-mile share

Monthly LPG tonne-miles (bn) per selected origin

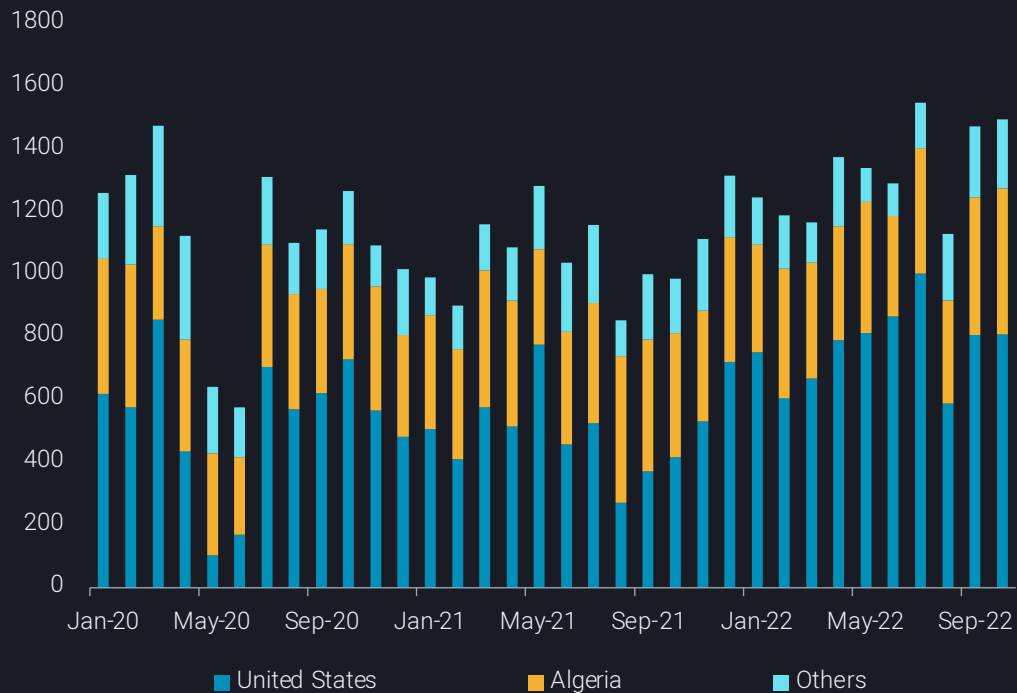


Daily LPG tonne-miles (bn) ex-US Gulf per destination region

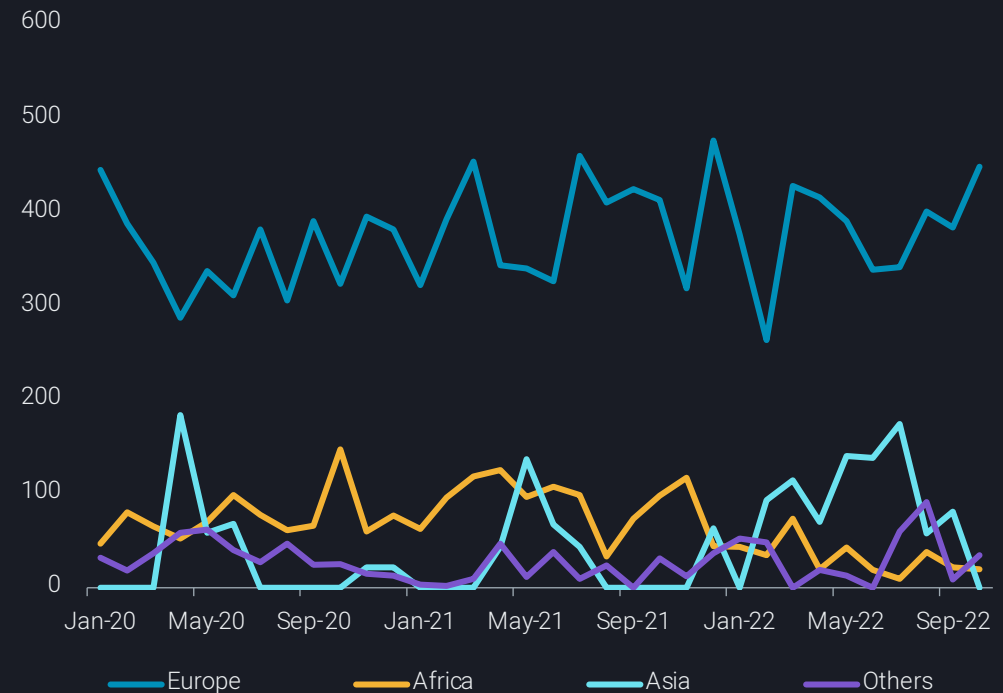


Europe steps up imports from Algeria but region's appetite capped by lacklustre petrochemical demand

LPG imports into Europe by origin country (mt)



Algeria LPG exports by destination region (mt)



Higher Middle East LPG exports, lacklustre Asia demand weigh on prices

Middle East LPG exports in the first ten months of this year surpassed volumes in the same period last year by nearly 20%, as higher crude production particularly from Saudi Arabia and the UAE boosted LPG supplies

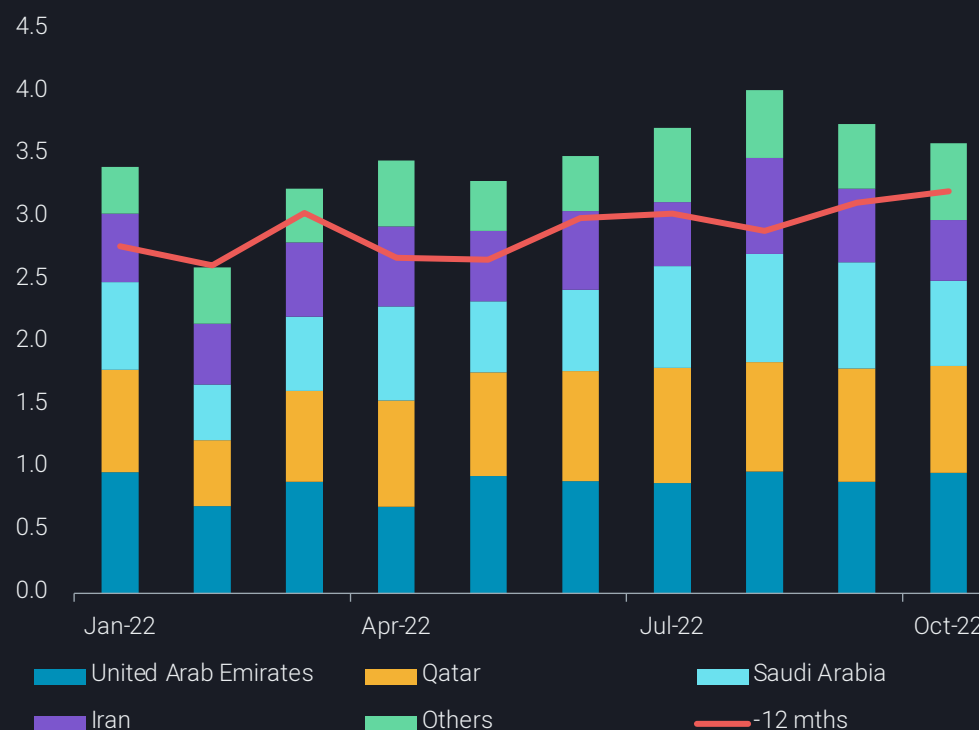
The region's stronger exports came at an inopportune time of lacklustre petrochemical demand in Asia, that has seen ethylene crackers and PDH plants operating well-below their design capacities

Saudi Aramco has consecutively reduced its propane CP since April reaching \$590/t in October, hinting at a well-supplied market. November's propane CP prices have risen marginally to \$610/t

Despite OPEC's recent production cut announcement, the LPG market showed limited price reaction in the days after, another indicator of bearish market sentiments

Although propane prices have climbed in recent weeks, they remain well-below levels seen in the same period last year or the highs in Q1/Q2 this year

Middle East LPG exports by origin country (mt)



[Get live data on platform](#)

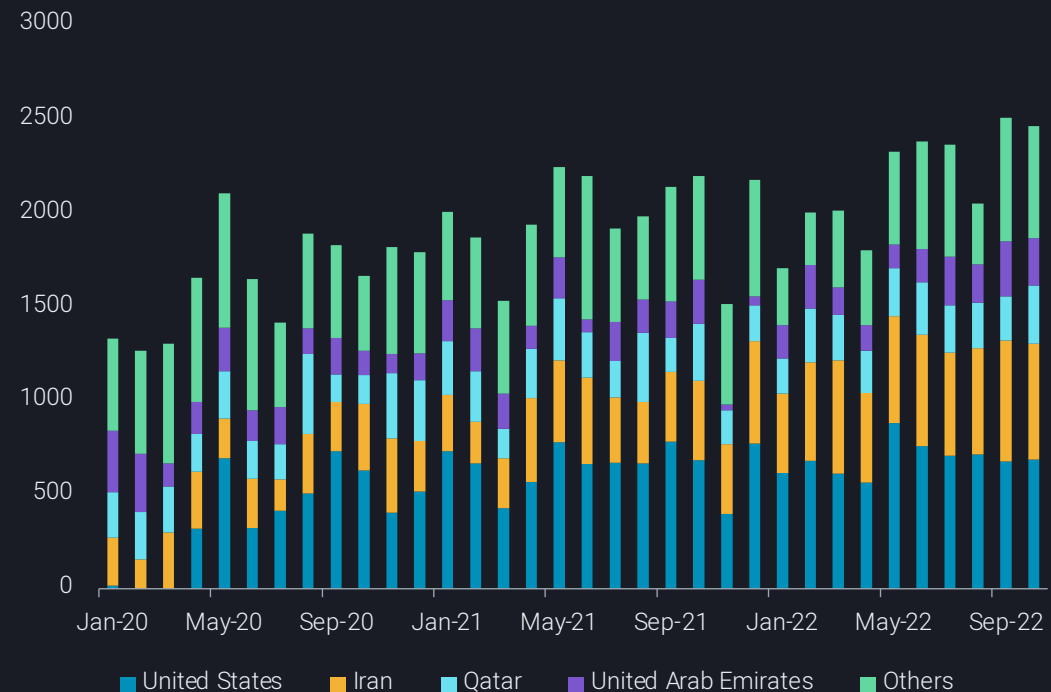
China's LPG imports remain at multi-year high but can it sustain the momentum?

China's LPG imports in October is on-track to sustain the record-high levels registered last month, buoyed by higher import demand from PDH plants

- Several PDH plants have returned from planned maintenance, while improved margins have driven others to ramp up utilisation opportunistically
- Rising propylene supplies, propane feedstock prices and freight rates are threatening to derail a steady recovery of PDH margins, and in turn dampen the country's LPG imports
- But this could be partially offset by new PDH plants starting up, with 450kt/year Wanda Tianhong PDH plant being the newest kid on the block, targeting to achieve on-spec production soon

The US remains as China's top LPG supplier, whilst supplies from Algeria has completely dried up for the second consecutive month due to the pull from Europe

China's LPG imports by origin (mt)



[Get live data on platform](#)

Festive demand and rising natural gas prices drive up India's LPG imports

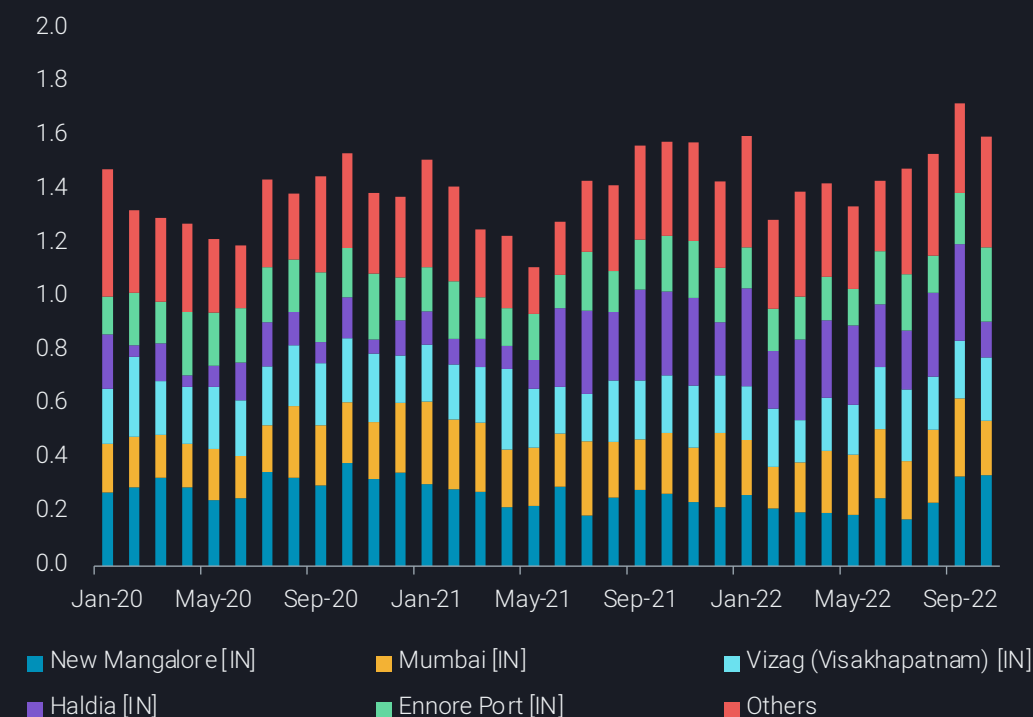
India's LPG imports reached a multi-year high of 1.7mt in September, cooling slightly in October.

- Strong imports have been supported by increased festive season demand and to an extent, switching from city gas to LPG in the industrial sector, amid widening LPG to natural gas prices
- Reinstatement of LPG subsidies for the lower income population by the government has further incentivized the switching from biomass to LPG
- The government has also approved a one-time grant to state-owned retailers to sell LPG below market rates last week

Due to rising import prices, the government has raised the natural gas price ceiling from Oct 2022 – Mar 2023 to \$12.46/MMBtu, more than double compared to \$6.10/MMBtu from April – September 2022, according to PPAC

- Natural gas imports account for close to 45% of the country's total consumption (PPAC), and soaring import prices have pushed the government to revise prices upwards
- Rising natural prices are pushing the industrial sector to switch to LPG

India LPG imports by destination port (mt)



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Japan and South Korea's LPG imports climb ahead of winter, led by residential and industrial sectors

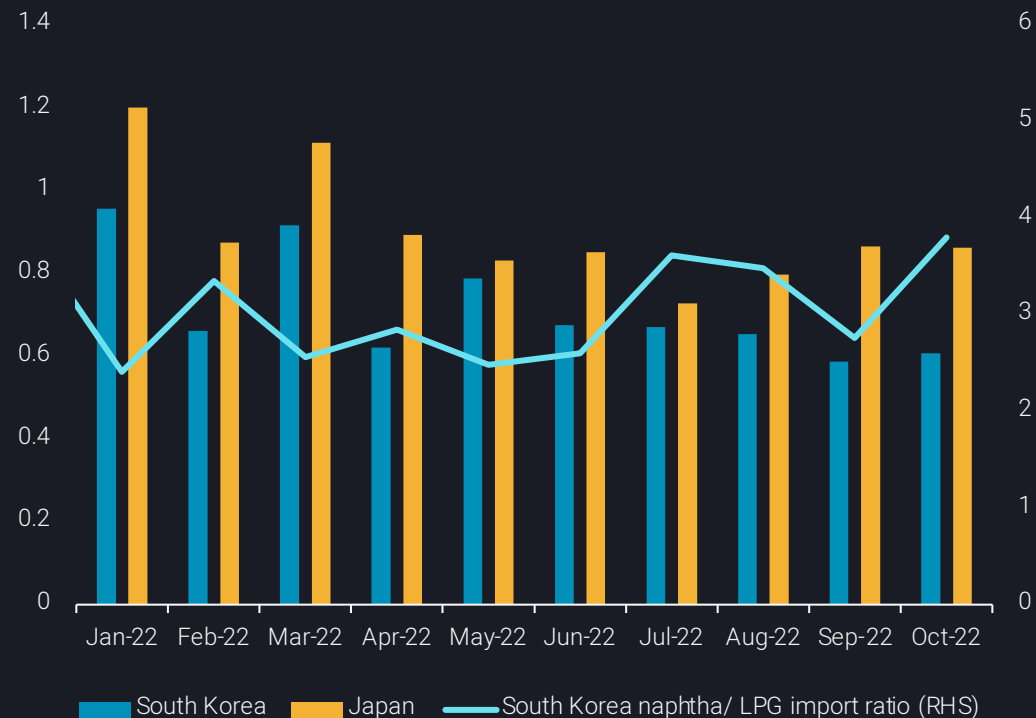
As winter approaches, Japan and South Korea are stepping up their LPG imports to meet increased demand from their residential and industrial sectors

- Imports into both countries are up over 20% and 5% m-o-m respectively in October, and are expected to remain robust in the coming months

Petrochemical feedstock demand for LPG remains lacklustre as ethylene margins continue to disappoint. Several crackers in both countries have extended their downtime, while others have cut runs this month

- South Korea's KPIC and YNCC No. 3 crackers are expected to restart next month, while LG Chem's Yeosu No. 1 cracker is likely to only restart in December (Argus)
- Discounts of LPG to naphtha, contrary to seasonal norms, may have contributed to increased LPG imports, but volumes are likely limited given the limited flexibility of feedstock switching in the crackers

Japan and South Korea LPG imports (mt, LHS) and South Korea's naphtha/ LPG import ratio (RHS)



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