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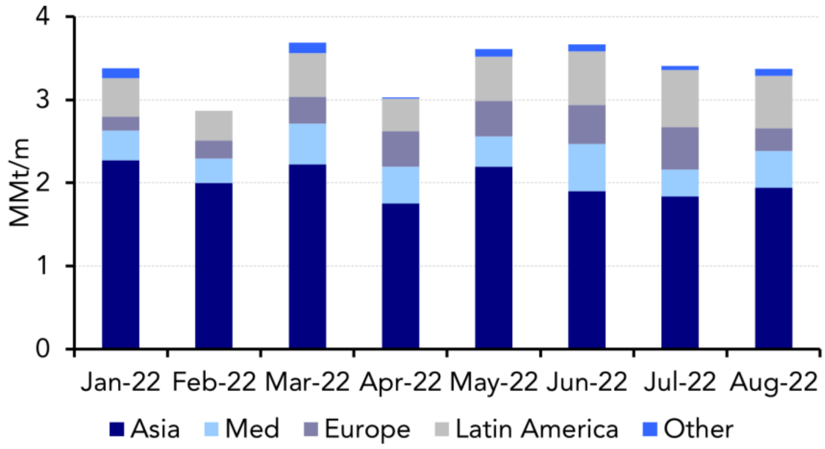
LPG in Worlds Market

Freight Rates Buoyed by Winter Demand Outlook

August VLGC/LGC imports into Northwest Europe from the US were the lowest since the Russian invasion of Ukraine amid tight arbitrage economics and lower demand. Imports should remain low in September, but that trend is expected to shift during upcoming winter months when demand from the residential and commercial sector is forecasted to be higher than usual.

US VLGC/LGC Exports by Region



Currently, propane demand from the petrochemical sector appears to be falling in Europe as propane's discount to naphtha gradually narrowed in August and turned to premium towards the end of the month. Average large-cargo propane price in Europe was $102/t lower than naphtha in July, which flipped to a premium of $21/t by the end of August. With high refinery run rates and lower demand for gasoline, naphtha prices are expected to remain depressed which could further cut LPG demand in September and require lower imports from the US.

In addition, European steam crackers are gradually reducing operating rates amid high natural gas price and lower demand for downstream chemical products. This is expected to depress overall demand for petrochemical feedstocks.

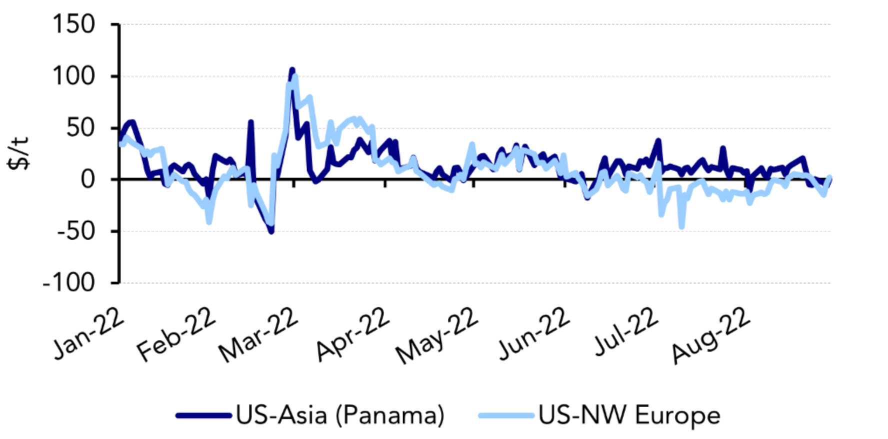
Demand for polyethylene and polypropylene rose sharply in 2020-2021 as Covid-19 increased demand for packaging, pharmaceutical, healthcare, and other personal protective products. That demand has fallen this year while worsening economic conditions due to high energy costs is expected to further cut petrochemical demand this winter due to demand destruction.

LPG demand from the residential sector should be low, at least through October due to mild weather. Moreover, high inventory levels in the region will limit import requirements in September and potentially through October.

Demand is expected to be higher this winter and will require increased imports later in the year. There is potential for significant demand increase from the industrial sector during winter. Some chemical plants are considering LPG as a substitute to natural gas for power generation or as a heating fuel, in the event Russia cuts supply of pipeline gas into Europe (additional details in September issue of LPG in World Markets)

Higher spiking in the Far East

US Arbitrage Economics



The arbitrage between the US and the Far East narrowed in August amid lackluster demand from the petrochemical sector. Manufacturing activity in China dipped for the second month in a row in August amid power shortages, real estate crisis, and Covid outbreaks. This has raised concerns about slower demand for LPG from the petrochemical sector.

Recessionary pressures, low petrochemical margins, and higher propane price in winter months could continue to weigh on LPG demand from PDH plants.

However, there is speculation of an economic stimulus after the Chinese Communist Party’s leadership congress in October when President Xi Jinping will be selected as the leader for the third term. The main questions are whether these stimuli will exclude the housing sector (which has been a key driver for PDH demand) and if energy prices will go even higher.

According to investment bank JP Morgan, this will not be the case. It expects that the housing market will no longer be a major lifting factor for China's growth, due to its structural slowdown and the policy efforts made toward economic transformation.

Despite these concerns, cargo fixing for September loading from the US Gulf Coast to Far East destinations has picked up in recent weeks. Some market participants were surprised with the uptick despite thin arbitrage. The increase could be to stock up ahead of winter months when demand could be higher than normal.

South Korea has increased the allowable limit to blend LPG into residential gas supplies. The country usually blends 100,000-200,000 t of LPG into winter gas; however, this year the demand could increase two-to-three times due to tight global LNG supply and extremely high LNG prices which are expected to incentivize higher volumes of LPG in the city gas.

Additionally, tight LNG supplies should increase LPG blending into residential gas supplies in Japan. Japan’s city gas sales have been trending up this year from last year alongside its gradual economic recovery. This has increased LPG demand for blending in the city gas in recent months.

Robust supply growth

Gas plant LPG production from the US is up nearly 7% in 1H from the same period in 2021 to 42 MMt, driven by higher gas production and infrastructure expansions. This trend should continue, evidenced by increased investments in the US midstream sector which have been focused on adding gas processing and NGL fractionation capacity in the next two years.

Most of the incremental LPG production will be exported with stagnant domestic demand (additional details in September issue of LPG in World Markets).

US inventories are also in a better position compared to last year ahead of the winter. Expectations are that arbitrage for US exports should improve in the coming weeks as demand in Europe and the Mediterranean region remains depressed until winter.

Sea exports from the Middle East are up by more than 5% in 1H to above 20 MMt. Higher crude oil and LNG production to meet rising global demand have also increased LPG supplies from the region.

Prices down, fixtures up

LPG prices in the US and Middle East have dropped due to supply increases and lower crude. Although the drop in US LPG is not as steep which could be attributed to seasonal domestic demand and a major fractionator outage in US Midwest.

The Saudi Aramco September propane contract price (CP) was set at $650/t, $20/t lower than August CP. Butane CP was set $30/t lower at $630/t.

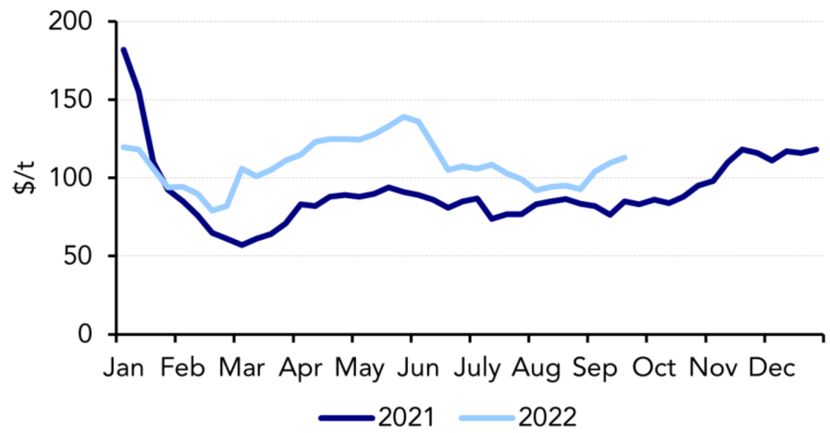
Average Mont Belvieu price at the Enterprise storage fell nearly $25/t to $583.52/t in August, according to Argus.

Despite the price drop, US arbitrage narrowed in August and were near cancellation levels in the past week which resulted at least two cancellations for September loading. Although market participants believe these cargoes will be re-offered by the export terminals at a lower premium.

In spite of the cancellations and razor thin arbitrage there was a significant jump in the number of fixtures for September loading from the US during the final two weeks of August underscoring market players are shifting gears to plan for the upcoming winter.

The higher activity supported VLGC freight rates. The majority of these cargoes will be heading towards the Far East region.

USGC to Japan via Panama spot VLGC rates



Spot VLGC freight rates for USGC to Far East via Panama Canal increased from $94.50/t at the beginning of August to $114/t recently.

The trend was similar for fixtures from the Middle East. There were increased fixtures for Far East destinations as well as driven by continued demand from India and Southeast Asian countries.

Spot VLGC freight rates for Ras Tanura to China increased from $59/t at the beginning of August to $65/t.

Middle East to Japan VLGC spot rates