



LPG in Worlds Market

Freight Rates Remain Bullish

Global LPG prices have fallen further in US Arbitrage Economics October as mild October weather delayed the onset of peak heating demand, easing energy supply concerns amid ample supply from the US and Middle East. Meanwhile, spot VLGC freight rates surged due to long Panama Canal waiting times, delays at some discharge ports, higher Australian exports and increased exports from the Middle East to Asia which tightened spot vessel availability.

The average propane price in the US Gulf Coast (USGC) fell nearly 15% month-over-month in October. While prices in the Far East and Northwest Europe declined 5% and 8% respectively. The steeper decline in the US improved the arbitrage economics.

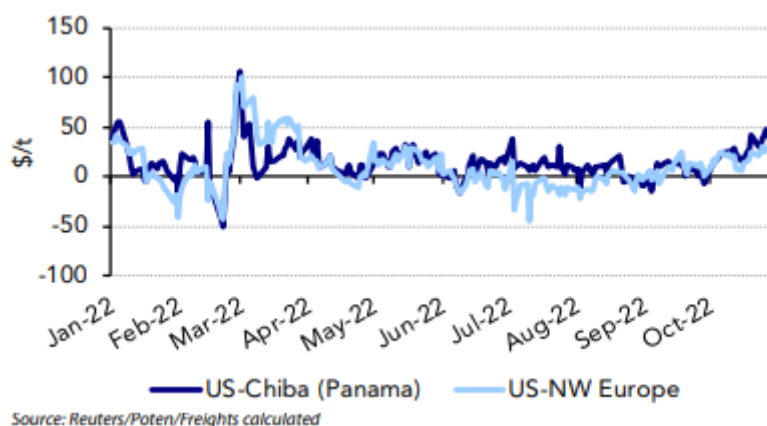
Prices in the US are expected to increase in the coming months which is normal during winter months; however, most market players expect the increase to be small and should not negatively affect exports considering robust production, high inventory levels and lower domestic demand. Although the arbitrage can narrow temporarily during burst of extreme cold weather.

Some Middle East producers have announced their November LPG contract price for term lifters higher than the previous month due to expected decreases in Middle East supplies and higher heating demand in the Northern Hemisphere.

OPEC's decision to lower oil production in November will slightly reduce LPG exports from Saudi Arabia, Kuwait and UAE. Meanwhile, declines in Iranian LPG exports in recent months should increase demand for exports from other Middle Eastern countries, according to sources.

This probably led Saudi Aramco to set both November propane and butane contract prices (CP) at \$610/t, up \$20/t and \$50/t, respectively. Kuwait Petroleum Corporation (KPC) also increased November propane and butane CP to \$610/t.

US Arbitrage Economics



The December CP swap is marginally higher on winter demand outlook, but the forward curve is trending downward indicating ample supply.

The higher m-o-m increase in November butane CP is due to lower Iranian exports as well as increased demand for mixed cargoes from India and Indonesia in recent weeks. Lower Iranian supply should continue to

support Middle East prices in December; however, this should not weigh on demand considering propane CP for November is still down 30% from last year.

Higher demand from the petrochemical sector in Asia and for home heating from December to February should also support prices.

Average PDH operating rates in China rose above 75% in October from below 65% in September. Average operating rates exceeded 80% towards the end of October. Higher run rates are expected to increase Chinese 4Q imports higher than last year.

Chinese LPG imports reached a record 2.8 MMT in September, up 31% from a year ago, according to customs data. Although this level of imports every month is unlikely, imports in 4Q should average around 2.5 MMT per month compared to below 2 MMT/m in 4Q 2021. However, the Chinese PDH recovery is not an indication of recovery in the petrochemical sector.

Major petrochemical companies across the world have indicated in their 3Q earnings call that the industry in general will remain depressed in 4Q due to weak global demand and will gradually pick up in 2023.

Higher heating demand from the residential sector should drive increased imports from December. South Korea's Kogas has started blending LPG in the citygas since October 19 in Incheon and is expected to do the same in Pyeongtaek from early November, according to sources. South Korea is expected to blend about 450,000 t of propane this winter through the month of April 2023, which is higher than last year, sources said.

Temperatures in Japan dipped below normal in late October boosting demand for LPG for heating. Japan has also started buying propane for spiking into citygas.

LPG imports into Northwest Europe also rose in October after falling in the previous month. Heating demand in the region was low in October due to unseasonably mild weather, lowering demand for natural gas. Natural gas prices dropped drastically in recent weeks in key pricing hubs as a result of high storage and low demand. However, LPG prices are not expected to follow the trend.

In addition, the UK's Meteorological office released its first seasonal outlook at the end of October indicating the recent warm weather may not be followed by a mild winter.

The agency's outlook said that chances of a cold winter (December-February) are now slightly greater than a mild one. The most likely scenario remains an average winter unlike the mild October which will drive demand for heating fuel.

Disruption in natural gas supplies from Russia during the cold months can result in higher-than-normal LPG imports as refineries continue to burn LPG instead of selling it in the market.

Soaring VLGC rates

Spot VLGC rates from the USGC to Chiba jumped to \$177.29/t at the start of November, the highest since January 2021 and up 32% from a month ago. Rates for Ras Tanura to Chiba reached \$109.14/t on the same day, up 35%.

The increase in the west of Suez was mainly due to tight vessel availability caused by Panama Canal delays. On Nov. 2, the southbound delay at the Panama Canal's Neopanamax locks reached 22 days and northbound delays hit 17 days.

The delays are the result of the increasing number of LNG vessels heading to the Far East instead of Europe and seasonal increases in container ships transiting the canal to deliver goods to the USGC.

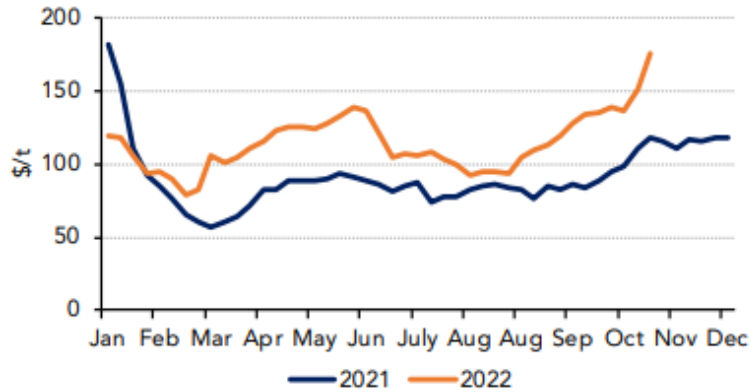
The long southbound delays could result in late cargo arrivals in the Far East. At the same time the cumulative delay in both directions will result in tight vessel arrival in the USGC where unbooked December cargoes will need ships and continue to support freight rates.

Freight rates for Ras Tanura to Chiba were supported by increased exports from the Middle East, driving more ships to the east of the Suez market where ship owners have been making slightly higher earnings.

Poten's records show 31 fixtures from the region in September and 27 in October which is much higher than last year. Out of these reported fixtures 25 in September and 23 in October were East Asia bound. Higher

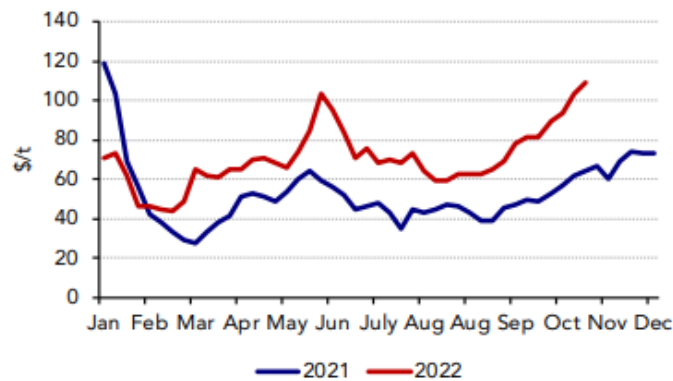
Indian demand and discharge delays at some ports in the country also lent support. The long delays at the Panama Canal could incentivize shipowners to keep vessels in the East market rather than ballast to the US.

USGC to Japan via Panama Spot VLGC Rates



This could further push freight higher in the coming weeks to attract ships in the West away from the East. Total VLGC/LGC loading fell for the second month in October after hitting a record high in August. Total loadings fell about 4% m-o-m to 6.7 MMt as higher shipments from the US were offset by slightly lower shipments from the Middle East, Mediterranean and Southeast Asia. Despite the decline, October VLGC/LGC loadings were 14% higher from last year.

Middle East to Japan Spot VLGC Rates



Global VLGC/LGC Shipments by load region

