



POTEN & PARTNERS

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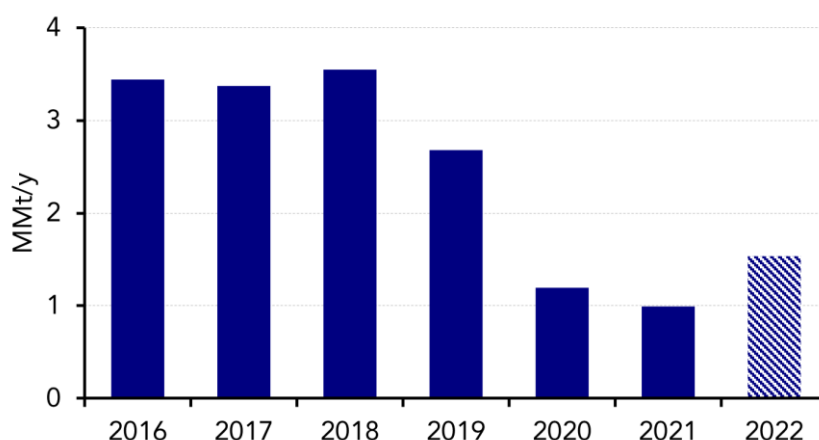
## LPG in Worlds Market

### No Significant Impact on LPG from Russia-Ukraine Conflict

There have been some concerns among market participants regarding the effects of the Russian invasion of Ukraine on the LPG market. So far, financial sanctions imposed on Russia by the US, EU, UK and others exclude energy-related payments which should allow continued flows on existing contracts; however, many international trading companies are avoiding new business with Russia.

Charterers may choose to avoid lifting LPG cargoes from the region as insurers are either not offering to cover ships or asking for huge premiums which could result in charterers seeking alternative sources. Without access to the international banking system it will be difficult for Russian companies to make payments for port dues, insurance etc. There have been reports of shelling on some commodity vessels in the Black Sea following the invasion. However, this should have only a small effect on global LPG supply.

#### *Russia's seaborne LPG exports*



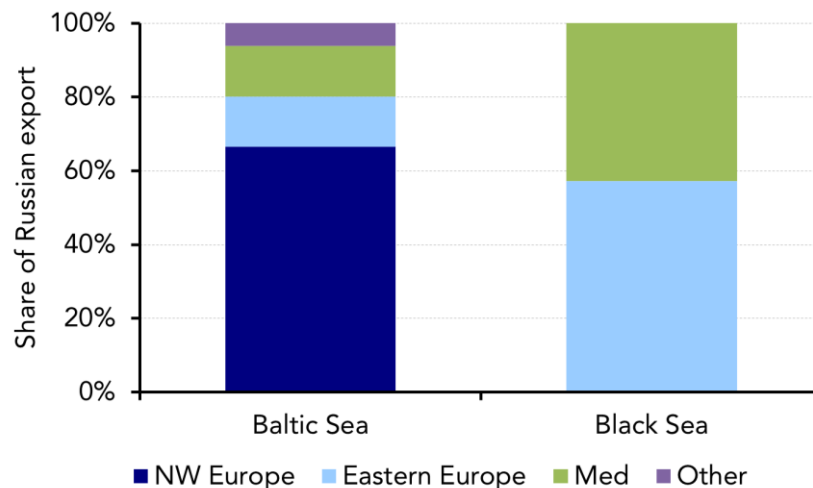
LPG exports from the Baltic and Black Sea have been on a steady decline since 2018 as domestic petrochemical consumption rose. Russian seaborne exports were around 1 MMt/y in 2021, down from 3.5 MMt/y in 2018. Prior to the conflict, exports were forecast to increase to 1.5 MMt/y in 2022 along with higher gas production; however, that growth is now uncertain.

About 75% of Russian seaborne LPG exports come from the Baltic Sea. Two thirds of that goes to Northwest Europe and about 30% is evenly split between the Mediterranean and Eastern Europe. It appears most of the impact will be on Europe but will not be significant for the region due to the small overall volumes.

Roughly 60% of the Black Sea exports go to Eastern Europe and the rest to the Med. Almost all cargoes are shipped on handy size vessels and should not have any direct impact on VLGC rates; however, high bunker price due to sharp increase in crude could lead to slow steaming.

The US is the most likely alternative source for Northwest Europe. In the short term, buyers in the Med could replace some of the volume from floating storage owned by players like Naftomar, sources said. Eventually, however, that storage would need to be refilled.

#### ***Share of Russian exports by destination in 2021***



The punitive sanctions on Russia will most likely stall the Ust-Luga LNG project which included a gas processing complex with 45 bcm/y of natural gas, 3.8 MMt/y of ethane and 2.4 MMt/y of LPG production capacity to start in 2025.

#### **High crude benefits petrochemical demand**

The impact of the conflict has been more prominent on global crude prices with Brent topping \$110/bl after the invasion. Global LPG prices also moved up tracking crude in February. Saudi Aramco set the March propane CP at \$895/t, an eight-year high and \$120/t higher than the previous month amid higher crude. The March butane CP was set at \$920/t, also an eight-year high and \$145/t higher than February.

Higher crude and the conflict also boosted LPG prices in the Med with Sonatrach setting the March propane contract price at \$830/t, an eight-year high. The Far East propane price also breached \$1000/t in early March, highest since January 2014.

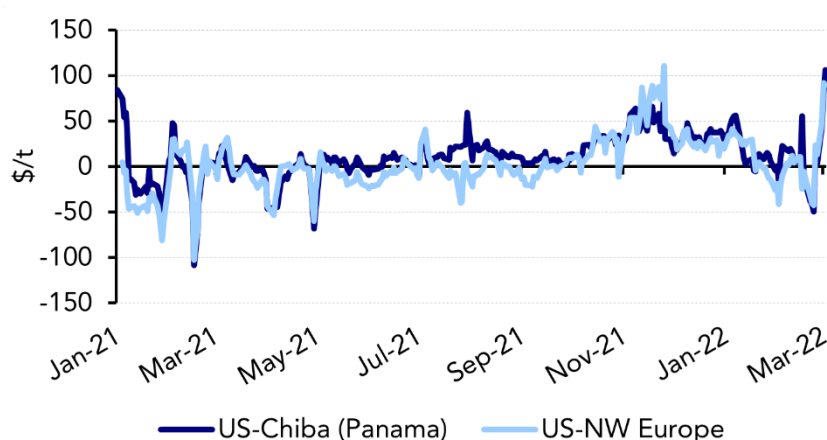
High crude prices affect naphtha prices more than LPG which should benefit LPG demand as feedstock for ethylene production from mixed-feed crackers. Russia is also an exporter of polyethylene (PE) and polypropylene (PP) to the EU and Med. Russian exports of petrochemicals have increased in the past year in these regions due to higher margins, while exports to China have fallen sharply. With sanctions, Russian companies like Sibur most likely will revert to China for exports of their petrochemicals.

As a result, EU and Med producers have to increase domestic production and/or source from other regions. This should increase demand for LPG for ethylene and propylene production to boost production of PE and PP.

Demand from the residential sector has shown resilience despite high prices in the past year and should remain robust. There could be some effect in autogas demand due to high LPG prices, especially in Eastern Europe where the conflict will disrupt supply and demand. Russia, Poland and Ukraine consume more than 6.5 MMt/y autogas and are among the top six autogas markets, according to WLPGA. Russian demand is supplied by domestic production. Poland and Ukraine consume more than 3 MMt/y of autogas for which Russia is a major supplier through both land and sea exports. Following the conflict Russia has stopped exporting LPG to Ukraine.

The broader macroeconomic effects of higher oil prices could be a slower economic recovery in 2022 than previous expectations. Currently the European market is tight. Several petrochemical producers have scheduled deliveries starting 2H March, according to sources. The Med market appears balanced, but the region is expected to be little tighter in a few weeks.

### **US arbitrage economics**



### **Freight rates remain depressed**

Spot VLGC freight rates for Houston to Chiba via Panama continued the downward trend in February falling 16% to \$79/t by the end of the month as lackluster buying interest from Asian players and relative strength in Mont Belvieu prices due to cold weather in the US narrowed arbitrage. A mild winter in Northwest Europe also reduced demand for US barrels in the region.

The tight arbs led to eight cargo cancellations from the US from February loadings. US propane and propylene exports averaged just above 1 MMb/d in February, 8% lower than previous month. Spot VLGC rates for Ras Tanura to Chiba fell in February by 4% to \$44/t also due to slack demand from Asia.

A steep backwardation in LPG prices is also a reason end-user are delaying purchases. As a result, available shipping capacity for March loading remains long in both the Middle East and the US Gulf Coast. Despite the length in available ships, there is limited downside to spot freight rates going forward as spot time-charter earnings are already down to about \$10,000/d and likely to worsen as bunker prices increase in tandem with crude.

Arbitrage between the US and Asia should also improve following the sharp increase in the Saudi Aramco propane CP which should push Far East prices higher. There could some supply tightness for butane from the Middle East region as evidenced by the sharp increase in March butane CP which could drive demand for mixed cargoes from the US. However, at the moment the consensus among

market participants is to avoid taking any speculative positions due to increased risk and to analyze the broader effects of sanctions on Russia.

### **Iran Nuclear Treaty More Likely**

There are also ongoing talks of reinstating the nuclear agreement with Iran which could lead to US lifting sanctions. Negotiations have been underway for a few months now and the potential disruption of Russian oil supply makes a deal more likely, according to most oil analysts.

If sanctions are removed, Iranian LPG, which is now mainly being exported to China, will be available for exports to other Asian countries. This could exert downward pressure on Asian LPG benchmarks. The return of ships tied to Iran-China trade could also weigh on VLGC rates.

Iran's seaborne exports are expected to reach between 5.2-5.5 MMt/y in 2022- 2023 depending on the completion of the final phase of South Pars field.