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U.S. exports of refined petroleum products highest in 50 years

(U.S. Energy Information Administration; Sept. 26) - In the first six month of 2022, U.S. exports of petroleum products averaged nearly 6 million barrels per day, the most first-half-of-year exports in the U.S. Energy Information Administration's data going back to 1973. U.S. exports increased in the first half of 2022 by 11% (596,000 barrels per day) compared with the first half of 2021 — the fastest growth rate for that time period since 2017. Nearly all products contributed to increased exports, and the largest volumes came from distillate fuel oil and hydrocarbon gas liquids, which includes propane.

High demand and low inventories globally — along with economic sanctions against Russia and self-sanctioning by some firms — have disrupted the global distillate trade. Propane was the most-exported U.S. petroleum product in the first half of this year by volume, continuing a trend started in 2020. U.S. propane exports averaged 1.4 million barrels per day in the first half of 2022, a 6% increase from the first half of 2021.

U.S. exports to Asia have grown rapidly in recent years as consumption of propane as a petrochemical feedstock and consumer demand have both increased. This year, however, changing supply patterns have increased Europe's demand for U.S. propane. Most of the growth in propane exports in the first half of 2022 went to Europe. Overall U.S. gasoline exports increased by 11% to reach a record of 910,000 barrels per day for the first half of 2022. U.S. jet fuel exports more than doubled in the first half 2022.

U.S. drillers go after more gas to cash in on high prices

(Bloomberg; Sept. 26) - In the rich fields of Texas, natural gas was always treated like the dregs that crews had to deal with as they pulled oil out of the ground. The two often emerge from wellheads together, and for decades drillers would simply burn off the gas or sell it at cost. Oil, and all the riches that came with it, was always the big prize. Now, in a sign of just how much Russia's invasion of Ukraine has thrown global energy markets into disarray, it's gas, not oil, that's becoming more coveted in U.S. shale fields.

U.S. drillers are scrambling to extract the gas, liquefy and ship more of it overseas. U.S. energy companies are expanding the search for gas at the fastest pace since 1992. Domestic prices for the fuel already have climbed more than 80% this year and the bullish drivers don't appear likely to fade any time soon: Record domestic natural gas production isn't keeping up with surging demand at home and overseas.

European buyers in recent weeks were paying the equivalent of more than \$90 per million Btu for gas. Convert that energy into crude and that's about \$550 a barrel — more than six times the price American drillers can command for their oil. Little wonder that U.S. gas drilling has soared more than 50% this year. Meanwhile, U.S. oil drilling has only risen 25% this year, according to Baker Hughes, a reflection of the much weaker performance of the underlying commodity relative to gas.

Goldman Sachs drops oil-price forecast, but still at \$100 by year-end

(Bloomberg; Sept. 27) - Goldman Sachs sharply lowered its oil price forecasts amid increasing signs of a global economic slowdown, but said that crude oil would probably climb from current levels because the market is still "critically tight. ... A strong U.S. dollar and falling demand expectations will remain powerful headwinds to prices into year-end," Goldman analysts said in a note on Sept. 27.

"Yet, the structural bullish supply set-up — due to the lack of investment, low spare capacity and inventories — has only grown stronger, inevitably requiring much higher prices," the analysts said. The Wall Street bank predicts Brent will average \$100 a barrel in the last three months of the year. That's above today's price of around \$85, but below its prior forecast of \$125. The benchmark will probably average \$108 in 2023, according to the analysts. They previously predicted \$125.

Oil prices soared to more than \$120 a barrel in the wake of Russia's invasion of Ukraine in February. They've slumped 30% since early June as central banks turn more hawkish and as coronavirus lockdowns in China crimp demand in the world's biggest crude importer. Still, oil markets seem to be assuming there will be no real economic growth outside of China next year, according to Goldman. That's below the consensus among economists and Goldman's own projection of 1% growth in China. "It would take an economic hard-landing to justify sustained lower prices," Goldman said.

Global oil trader warns of future price spikes

(Bloomberg; Sept. 26) – There is downward pressure on oil prices in the short term, but further out the market is vulnerable to sudden price spikes, according to the world's biggest commodity trader. Sustained underinvestment and very little spare capacity will be tested if demand comes back rapidly, said Saad Rahim, chief economist at Trafigura Group. The loosening of China's COVID-Zero policy could quickly lift consumption, prompting a rush for oil supplies that the market won't be able to meet, he said.

"We're potentially moving from a world of commodity cycles to a world of commodity spikes because of the underinvestment that has taken place in the last decade," he said in an interview on the sidelines of the APPEC 2022 conference hosted by S&P Global

Commodity Insights in Singapore. Global benchmark Brent crude has fallen by about one-third from a high in early March on a combination of monetary tightening, recession fears and a surge in the dollar.

Headwinds will keep oil prices under pressure in the short term, Rahim said. For the moment, that's outweighing supply risks including the threat of a sharp curtailment in barrels from Russia due to the European Union embargo and the longer-term consequences of underinvestment, he said. If, for example, the world needed an additional 2 million to 3 million barrels a day due to recoveries in China or the U.S., producers would struggle to find those supplies as there's little spare capacity, he said.

No answer yet on what caused Russian gas pipeline explosion

(The Associated Press; Sept. 28) - Denmark believes "deliberate actions" caused big leaks in two natural gas pipelines running under the Baltic Sea from Russia to Germany, and seismologists said powerful explosions preceded the leaks. European leaders and experts pointed to possible sabotage amid the energy standoff with Russia provoked by the war in Ukraine. Although filled with gas, neither pipeline is currently supplying the fuel to Europe. "It is the authorities' clear assessment that these are deliberate actions - not accidents," Danish Prime Minister Mette Frederiksen said Sept. 27.

'There is no information indicating who could be behind it," she said. The leaks occurred in international waters. The first explosion was recorded early Sept. 26 southeast of the Danish island of Bornholm, said Bjorn Lund, director of the Swedish National Seismic Network. A second, stronger blast northeast of the island that night was equivalent to a magnitude 2.3 earthquake. Seismic stations in Denmark, Norway and Finland also registered the explosions. "There's no doubt, this is not an earthquake," Lund said.

Denmark's Foreign Minister Jeppe Kofod said Sweden, Germany and Poland have been kept informed, and "we will inform and reach out to Russia in this case." The leaks created a foamy white area on the water's surface, images released by Denmark's military show. Danish Energy Minister Dan Jørgensen said. "We cannot say how long the leak will go" on for as the gas has not been turned off. There was no indication when the gas would be turned off. The German operator of the pipelines, Nord Stream said it's preparing a survey to assess the damage.

Pipeline blasts drive LNG prices even higher in Europe and Asia

(Bloomberg; Sept. 28) - The suspected sabotage of pipelines carrying Russian gas to Europe looks set to intensify already-heated global competition for shipments of the power-station fuel. The currently out-of-action Nord Stream pipeline system was damaged, with Germany saying it suspected it was an act of sabotage. It came as

Russia also threatened to cut off gas to Europe via a major link through Ukraine, which would be a sharp escalation in the conflict between Moscow and the West.

European gas prices surged more than 20% at one point on Sept. 27, with Asian liquefied natural gas futures also rising on the worsening supply outlook. The potential curtailment of more Russian gas will lead to more scarcity in an already frenzied market. Asia LNG derivatives for December were around \$51 per million Btu on Sept. 28, according to traders and brokers. Prices have jumped about 20% since Sept. 27.

"Europe will have to source gas elsewhere indefinitely, and will look heavily to buying U.S. LNG," said Toby Copson, global head of trading and advisory at Trident LNG, a gas trader. "Asia and Europe will be in a stand-off. We will need to see how Japan and South Korea react." There's a rush to book vessels to carry more U.S. gas across the Atlantic, pushing up shipping rates to near-record levels, traders said. Europe got 40% of its gas from Russia before the war in Ukraine, a figure that now stands at about 9%.

Methane leak from Nord Stream line 'catastrophic for the climate'

(The Associated Press; Sept. 28) - Methane leaking from the damaged Nord Stream pipelines is likely to be the biggest burst of the potent greenhouse gas on record, by far. The Nord Stream pipeline leaks that were pumping huge volumes of methane into the Baltic Sea and atmosphere could discharge as much as five times as much of the potent greenhouse as was released by the 2015 Aliso Canyon disaster, the largest known terrestrial release of methane in U.S. history. It is also the equivalent of one third of Denmark's total annual greenhouse gas emissions, a Danish official warned Sept. 28.

"Whoever ordered this should be prosecuted for war crimes and go to jail," said Rob Jackson, a Stanford University climate scientist. Two scientists looked at the official worst-case scenario estimates provided by the Danish government — 27.5 billion cubic feet gas — for the Associated Press. They calculated that would be an equivalent of roughly half a million metric tons of methane. The Aliso Canyon disaster in California released 90,000 to 100,000 metric tons.

Andrew Baxter, a chemical engineer who formerly worked in the offshore oil and gas industry and is now at the environmental group EDF, thought the Danish estimate was likely too high. He had a more conservative estimate. "That's one thing that is consistent with these estimates," he said, "It's catastrophic for the climate." Methane seen bubbling at the ocean surface was an indication of "a strong upward flow," according to Paul Balcombe, a member of the engineering faculty at the department of chemical engineering at Imperial College London.

Sanctions on Russia reorient trade flows of Mideast and U.S. oil

(Reuters; Sept. 26) - Russian oil is expected to come to Asia and the Middle East, while refined fuel produced in these regions will flow to the West as the global oil trade is disrupted by sanctions, Vitol's CEO Russell Hardy said on Sept. 26. The Russia-Ukraine war has made energy security the top issues for governments as they grapple with inflation. With bans on Russian oil looming and Moscow slashing gas supplies to Europe, policymakers are setting aside sustainability concerns for now.

"Energy Security is No. 1. Price is No. 2. Sustainability is No. 3," Hardy said of key priorities in the short term. More than a million barrels per day of U.S. crude is expected to go to Europe to fill the gap in Russian supplies, he told a forum at the 38th Annual Asia Pacific Petroleum Conference, adding that Russian commodities would need to find a home in places outside the United Kingdom, the United States and European Union. "It's going to go further and longer distances and find different markets, and in doing that it's going to have to trade at a discount," Hardy said.

"You're beginning to see that with fuel coming East that would otherwise have stayed in Europe, and fuel in the East going to the West to cover the shortfall." The EU is set to ban Russian crude from December in a move to strip the Kremlin of revenue. Russian crude imports into the EU and U.K. last fell to 1.7 million barrels per day in August from 2.6 million in January, according to data from the International Energy Agency, though the EU was still the biggest market for Russian oil. The IEA also forecast that the U.S. could soon overtake Russia as the main crude supplier to the EU and U.K. combined.

High LNG prices make it hard on small traders

(Reuters; Sept. 27) - Rocketing LNG cargo prices have squeezed out dozens of smaller traders, concentrating the business in the hands of a handful of international energy majors and top global trading houses. This grip is not expected to ease until 2026 when more liquefied natural gas starts to materialize, adding to supply worries until then for poorer states reliant on it to generate power and driving up costs for Asia economies.

The global LNG market has more than doubled in size since 2011, ushering in dozens of new entrants and the expansion of smaller players in Asia. In recent years, smaller traders accounted for 20% of LNG imports in China alone. But a spike in spot LNG prices to \$175 million to \$200 million per cargo, from around \$15 million to \$20 million two years ago, has had a seismic impact on trading activity for many smaller players.

"The biggest challenge facing every market participant right now is credit," said Ben Sutton, CEO of Six One Commodities, a U.S.-based LNG merchant that had to scale down operations after prices soared in the third quarter of 2021. Short-term market volatility has heightened risk for traders, with geopolitics rather than fundamentals driving price moves. "The ballooning of LNG cargo values, along with the spike in

volatility, has ... put quite a strain on those players operating with smaller balance sheets," said Tamir Druz, managing director of Capra Energy, an LNG consultancy.

Report shows Europe able to buy enough LNG to survive winter

(Bloomberg; Sept. 27) - Europe's frenzied buying of liquefied natural gas means it's likely to have enough of the power-generation fuel this winter to offset supplies from Russia, according to BloombergNEF. The region may import almost 40% more LNG during the coming winter than in the prior year, while it may increase purchases next summer by about 14% to rebuild lost inventories, BNEF said in a report published Sept. 27. Along with demand destruction from higher energy prices, those shipments are enough to cover a complete halt in Russian pipeline flows from Oct. 1, it said.

To source the extra fuel, European buyers will need to purchase 90% more LNG on the spot market than they have secured under long-term contracts, further ratcheting up competition with Asia for the gas. That will support global gas prices that have soared since Europe sought to reduce its reliance on Russia after its biggest supplier invaded Ukraine in late February. "Elevated spot LNG prices are set to persist as Europe needs to maintain its pull on all available LNG supply, leaving very little for Asia," BNEF said.

However, more Russian LNG will go to China, though winter demand there is expected to drop 16% from a year earlier. Japan's consumption is forecast to fall 8% in the fourth quarter from the same period in 2021 as Japan turns on coal-fired plants, while South Korea's demand could rise 10% year-on-year because of stockpiling, the report said.

West Coast Canada LNG exports will play important role

(The Globe and Mail; Canada; Sept. 27) - Canada's West Coast is positioned to become a reliable supplier of liquefied natural gas, but the East Coast faces pipeline constraints, said TC Energy CEO François Poirier. With Europe experiencing an energy crisis after Russia invaded Ukraine, Poirier said he is optimistic West Coast exports to Asia will play an important role by injecting needed LNG supply into the global market.

TC Energy is constructing the C\$11.2 billion Coastal GasLink pipeline, which is designed to transport gas from northeast British Columbia to LNG Canada's export terminal under construction in Kitimat, B.C. The first phase of the Kitimat facility will have the capacity to export 14 million tonnes of LNG a year to Asia, starting in 2025. A second phase being contemplated by LNG Canada, a consortium led by Shell, would double the export capacity. "We're continuing to work closely with LNG Canada and are studying the feasibility of the second phase," Poirier said.

He was less certain about proposals to transport gas from Alberta to the East Coast, where two developers want to build LNG export terminals to serve Europe. Poirier said it would be difficult financially and logistically, compared with shorter distances for pipelines within B.C. or from Alberta to the West Coast. "The Western Canadian Basin being quite far away from the East Coast can make the economics challenging," he said. "But there are other potential benefits — diversity of supply, security of supply — that can make East Coast LNG viable, and we have to assess them."

TotalEnergies will boost LNG production, but not in Russia

(Reuters; Sept. 28) - French oil major TotalEnergies said it would increase investments and ramp up production of liquefied natural gas as it laid out its strategy for a possible future without Russia — while stopping short of severing links. Unlike rivals such as BP and Shell, TotalEnergies has held on to several of its holdings in Russia, which include key LNG joint ventures. But on Sept. 28, at an investor presentation in New York, it set a series of business targets for the next five years that excluded its Russian interests.

"There is no future with Russia in this presentation," CEO Patrick Pouyanne said. "Less Russia, more U.S.," he added. Total is seeking to diversify away from Russia — one of its main sources of LNG. As Europe scrambles to find alternatives to Russian gas, TotalEnergies said it would grow sales of LNG by 3% a year through 2027 and increase LNG production by 40% from 2021 to 2030. Capital expenditure will be increased to \$14 billion to \$18 billion a year through 2025 from \$13 billion to \$16 billion previously, with investments targeting wind and solar energy, energy savings as well as LNG capacity.

The future of the company's Russian investments — including minority stakes in Russian gas producer Novatek, and the Yamal LNG and Arctic LNG-2 projects — remains the elephant in the room, analysts said. Total has said it will not invest in new projects in Russia and will phase out purchases of Russian oil by the end of 2022.

UAE national oil company will supply LNG and diesel to Germany

(S&P Global Platts; Sept. 25) - The UAE's Abu Dhabi National Oil Co. (ADNOC) will supply German companies with LNG and diesel in 2022 and 2023 as Europe's biggest oil consumer seeks to diversify energy sources amid reduced supply of Russian gas and upcoming European Union sanctions on crude and oil product imports from Moscow. As part of a new Energy Security and Industry Accelerator agreement signed between the UAE and Germany, ADNOC will supply utility RWE with an LNG cargo in late 2022, delivered to the country's new floating LNG import terminal in Brunsbuttel.

ADNOC has also earmarked several LNG cargoes for German customers for delivery in 2023, the agency said, without disclosing further details. The agreements were signed

during a state visit by German Chancellor Olaf Scholz to the UAE, the second stop on a three-country trip that started in Saudi Arabia and will take him next to Qatar, where other energy deals are likely to be signed. ADNOC, which completed its first-ever direct diesel delivery to Germany in September, has agreed to the terms with distributor Wilhelm Hoyer on the supply of up to 1.875 million barrels of diesel per month in 2023.

Santos has a buyer for slice of Papua New Guinea LNG project

(Reuters; Sept. 26) - Australia's Santos has received a \$1.4 billion binding offer from Papua New Guinea's state-owned Kumul Petroleum for a 5% stake in the PNG LNG project, the gas explorer said on Sept. 27. Santos became the largest shareholder in PNG LNG, Papua New Guinea's largest resource project, with its takeover of Oil Search last year. PNG LNG is considered one of the world's lowest-cost LNG producers.

The offer is conditional on Kumul obtaining waivers of certain preemptive rights by every other participant in the PNG LNG project, Santos said. Santos will deal exclusively with Kumul until Dec. 31 regarding the stake in PNG LNG. If the sale goes through, Santos will end up with 37.5% of the project, still ahead of ExxonMobil, the operator, with 33.2%. Kumul Petroleum will own 21.8%, with the remaining shared between a unit of Japan's JX Holdings and PNG state-owned Mineral Resources Development Co.

The potential stake sale will support the "PNG government objectives for the people of PNG to have a greater equity interest in the development of their natural resources," Santos said in a statement. Papua New Guinea has sought more control over its oil, gas and mineral resources since Prime Minister James Marape took power.

The PNG LNG stake was one of three assets Santos put up for sale this year aiming to raise up to \$3 billion. However, it pulled the sale of a stake in the Pikka oil project in Alaska after failing to find a buyer at the right price. Plans to sell a stake in the Dorado oil project in Australia are on hold as Santos has delayed approval for the development.

China opens another LNG import terminal

(Global Times; Sept. 27) – A carrier loaded with about 4.5 billion cubic feet of natural gas as LNG docked at Yancheng Binhai Port, East China's Jiangsu province on Sept. 26 to unload at the Yancheng Green Energy Port belonging to China National Offshore Oil Corp. (CNOOC), marking the official start of operation at the country's largest LNG reserve base. The gas from the ship can supply 6.5 million households for one month, according to China Media Group.

Located in Yancheng, East China's Jiangsu province, CNOOC Yancheng Green Energy Port is a key national project for natural gas production, supply, storage and marketing

and is the largest LNG reserve base in China. The first phase of the project includes 10 large-scale LNG storage tanks. In recent years, China has accelerated the construction of coastal LNG receiving facilities as the consumption of gas increases. By the end of 2021, China had completed 22 LNG receiving terminals with a total annual receiving capacity of 92.27 million tonnes, ranking first in the world in terms of scale.