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China's LNG import demand growth slows to lowest rate since 2002

(Bloomberg; Oct. 12) – China's liquefied natural gas importers will stay out of the spot market this winter as demand growth has skidded to the slowest since 2002, meaning the world's top importer of the fuel will likely avoid competing with crisis-hit Europe for supplies. That reduced demand means China should yield its top importer title back to Japan this year, easing pressure on the global market and offering much-needed relief to Europe, which is scrounging for cargoes after Russia cut pipeline gas flows.

China's total LNG imports are expected to post their first major annual decline since 2006, with estimates from consultancies JLC, ICIS and Rystad Energy of total imports ranging between 65 million to 67 million tonnes. That would be down from a record 78.9 million tonnes in 2021, according to data from China's General Administration of Customs. Fourth-quarter shipments may fall by one-fifth from a year earlier, according to estimates from JLC analyst Ricki Wang. Meanwhile, China is pumping more gas domestically and receiving more from Russia both by pipeline and as LNG shipments.

"China basically stopping bidding for spot is great because (there is) one less party to fight for cargo," said Alex Siow, ICIS lead Asia gas and LNG analyst. Reduced demand means China is over-contracted for LNG, "and this is big news for the market because being over-contracted means that China is essentially growing the spot pie," he said. He added this is good news for Europe, as "Europe is basically just going for spot right now." Analysts at JLC, SIA Energy and Rystad Energy expect China's gas consumption to hold steady or even decline by 2% this year, the slowest growth since at least 2002.

Morgan Stanley raises LNG price forecast amid tight supply

(Bloomberg; Oct. 7) - Morgan Stanley raised its price estimates for liquefied natural gas in 2023 and 2024, seeing Europe's soaring demand for the fuel intensifying global competition for supplies. The continent looks set to cope this winter even as Russia cut gas exports to the minimum, but next year the supply crunch really could bite. Europe will need even more LNG to replace Russian volumes next summer when the continent will be refilling storage, while China's demand will recover from lockdowns.

"We see a rising (supply) deficit next year," Morgan Stanley analysts said in a note. "We see the need for prices to remain elevated for longer to continue constraining demand." The bank now sees Asian LNG prices averaging \$39.50 per million Btu next year, up by almost a third from the previous \$30 forecast. The 2024 forecast was raised by 57% to

\$34.50. That echoes comments from top LNG producers, which see the market getting even tighter next year and remaining short of supply until at least the mid-2020s.

Next year, Europe's call for LNG could rise by almost 50 million tonnes, according to Morgan Stanley, and it may still have below-normal inventories for winter 2023-24 under most scenarios. China may need an additional 10 million tonnes, a 14% increase in demand, which will partially offset lower purchases from some other Asian importers, including Japan and South Korea that are rushing to replace expensive gas in power generation by alternatives like coal and nuclear.

LNG sellers demand better terms in tight market

(Oil & Gas Journal; Oct. 11) - Recent global LNG contracting activity has shown a return to traditional destination-fixed terms, while the duration and volume terms are more balanced, the International Energy Agency said in its latest quarterly Gas Market Report. "The observed tightening of the LNG market ... has put sellers in a stronger position to demand more traditional features in newly signed LNG contracts, such as longer durations, fixed destination and larger quantities," the report said.

Flexible contracts accounted for almost 80% of the average new contracted volumes in 2018-2019, driven by final investment decisions in the U.S. However, the share of destination-flexible contracts fell to 35% in 2020 and 11% in 2021 as the share of destination-fixed contracts rose. "This trend of returning to destination-fixed terms results from a declining share of flexible supply sources in contracting activity (mainly in the U.S.) and a corresponding rise in available supply from Eurasia and the Middle East with a preference for fixed-destination sales contracts," said IEA.

"Meanwhile, the opposing trends of short-term scarcity and longer-term uncertainty of natural gas demand have prompted certain buyers to opt for shorter and smaller contracts," the IEA report added.

LNG Atlantic charter rates spike to record \$397,500 a day

(Bloomberg; Oct. 11) - Liquefied natural gas carrier charter rates have hit a record high, with Europe's dash to lock in winter energy supplies sparking a scramble for ships and raising fears some buyers may find themselves without means to transport the fuel. The cost to charter an LNG ship in the Atlantic jumped to \$397,500 per day on Oct. 11, surpassing an all-time high set in the Pacific last year, according to Spark Commodities, which assesses prices from shipbrokers.

Those rates are poised to keep ballooning as traders and utilities move to hoard more gas. This presents a new risk to buyers this winter: Those without ships will have to pay

sky-high rates to ferry additional fuel, or worse, find they can't book any ship at all. There are few vessels available through the rest of the year, and available ones are being offered at astronomical rates, according to LNG traders. Energy majors, which typically lease their vessels to other buyers, are refusing to do so out of fear they could be caught without a ship as winter approaches, the traders said.

Europe's gas storage is quickly filling up in preparation for a winter without Russian fuel. Inventories are nearing max capacity, and utilities and traders are increasingly storing LNG in vessels at sea, further tying up ships that would normally ferry the fuel between ports. Ships are in such short supply that LNG exporters that don't have vessels are being forced to find buyers that have a way to transport the cargo, traders said.

Africa getting ready to help ease Europe's energy crisis

(Associated Press; Oct. 12) - A new liquefied natural gas project off Africa's western coast may only be 80% complete, but already the prospect of a new energy supplier has drawn visits from the leaders of Poland and Germany. The initial field near Senegal and Mauritania's coastlines is expected to contain about 15 trillion cubic feet of gas, five times more than what gas-dependent Germany used in all of 2019. Production and exports from the 2.5 million-tonne-per-year LNG facility are expected to start next year.

That won't immediately help Europe's energy crisis. Still, Gordon Birrell, an executive for co-developer BP, said the development "could not be more timely" as Europe seeks to reduce its reliance on Russian gas to power factories, generate electricity and heat homes. While Africa's gas reserves are vast and North African countries like Algeria have pipelines linked to Europe, a lack of infrastructure and security challenges have long stymied producers in other parts of the continent from scaling up exports.

Nigeria has Africa's largest natural gas reserves, said Horatius Egua, a spokesman for the petroleum minister, though it accounts for only 14% of the European Union's imports of LNG. Projects there, however, face the risk of energy thefts and high costs. Other promising countries like Mozambique have discovered large gas reserves only to see LNG projects delayed by violence from Islamic militants. Italy signed a \$4 billion gas deal with Algeria in July, a month after Egypt reached an agreement with the European Union and Israel to boost sales of LNG. Angola also has signed a gas deal with Italy.

Italy could face sizable gas shortage next year without LNG terminal

(Reuters; Oct. 11) - Italy could face a gas shortfall of 175 billion to 210 billion cubic feet of natural gas in the winter of 2023-24 without a new regasification terminal, the CEO of energy major Eni Claudio Descalzi said on Oct. 11. Italy plans to set up a liquefied natural gas import terminal in the city of Piombino, in Tuscany, installed on a floating

storage and regasification unit (FSRU), which should be operational by the end of March next year to increase supply and make up for a shortfall of Russian imports.

The infrastructure, operated by gas grid operator Snam, needs to get a green light by the end of October to add to the country's LNG capacity in early 2023. "We absolutely need a new LNG terminal, otherwise accounts do not add up," Descalzi said during an energy conference. Italy, like most of Europe, is struggling to replace Russian gas.

Ireland's energy shortage could last to 2031

(Bloomberg; Oct. 6) - Ireland's energy shortage will last until 2031, with unplanned outages making a bad situation even worse in the near term, the nation's grid operator said. Power plant capacity remains poor and EirGrid assumes that some generators that were due to shut in September next year won't be available at all, the firm said Oct. 6 in a capacity report covering Ireland and Northern Ireland.

The island needs all the power it can get as the energy crisis is raging in Europe. Demand is forecast to increase by 37% by 2031, with 28% of that coming from data centers and other new large users. At the same time, most new capacity that was expected online over the coming years has been withdrawn, according to the report.

"The number of system alerts will increase as our economy grows, electricity generators exit the market and demand increases, with significant new additional demand from the heat and transport sectors as they are electrified," EirGrid CEO Mark Foley said. To lessen the shortage, the regulator plans to hold capacity auctions of flexible gas-fired generation capacity, procure 700 megawatts of emergency generation, temporarily extend the operation of older plants and raise rates to cut demand at peak times.

Permian gas production outpaces pipeline capacity, hurting prices

(S&P Global; Oct. 11) - Cash prices at the Waha hub in Texas are trading at their lowest in over five-years this month as weaker autumn gas demand and record Permian Basin production test the limits of pipeline capacity in West Texas. Month to date, spot gas at Waha has traded at an average \$2.74 per million Btu discount to the benchmark Henry Hub — more than \$2.30 below its October 2021 average and its weakest for the month of October in more than five years, data from S&P Global Commodity Insights shows.

Historic basis price weakness at Waha started last month as Permian gas production edged up toward the range of mid-15 billion cubic feet per day. Producers' push to boost output back toward record territory came just as cooler weather began putting the brakes on gas demand in West Texas and other neighboring markets. While a drop in prices at Waha and other West Texas locations is not unusual in the lower-demand periods of fall and spring, the depth of this season's drop is striking and is likely the result of increasing congestion on pipelines. Over the past several years, the additional new capacity of Gulf Coast Express, Permian Highway and Whistler Pipeline had many analysts and market observers anticipating a longer growth period for Permian production. The additional 6 billion cubic feet per day in capacity added by the three expansions, though, has been quickly consumed by rapid production growth.

Gulf Coast LNG terminals not welcome by all neighbors

(Agence France-Presse; Oct. 9) - As war rages in Ukraine, and Europe thirsts for fuel, the liquefied natural gas industry along the U.S. Gulf Coast is preparing to expand — a distressing development to some nearby neighbors. "It's our life they took here," said Travis Dardar from the doorstep of his camper trailer. An imposing LNG terminal — a massive facility that receives and liquefies gas from pipelines, then loads the LNG on ships for export — will soon loom next to his house, forcing him and his wife to move.

Another plant is also planned where he fishes, imperiling his shrimp and oyster business. "This is way more catastrophic than any hurricane," Dardar says, adding that people can rebuild after a hurricane. In this marshy coastal region between Texas and Louisiana, the increase in LNG export terminal projects has unsettled some residents, who consider the plants to be a threat to their coast, their serenity and way of life.

Last March, a few weeks after the first salvos of Russia's invasion of Ukraine, President Joe Biden pledged to increase LNG deliveries to Europe, which has traditionally been heavily dependent on Russian gas. U.S. suppliers have exported 1,574 billion cubic feet of gas to Europe so far in 2022, a sharp rise from 917 bcf in 2020, according to the Center for Liquefied Natural Gas, a Washington-based trade group.

The U.S. has become the world's largest exporter of LNG, an industry centered around the energy-rich Gulf of Mexico states of Texas and Louisiana, with their infrastructure and strategic location. This area has five of the seven active U.S. export terminals, two under construction and more than a dozen in the development or permitting stage.

Gas producer, pipeline companies get together to promote U.S. LNG

(Natural Gas Intelligence; Oct. 11) - EQT, the largest U.S. natural gas producer, has teamed up with pipeline operators TC Energy and Williams to establish a coalition that will focus on increasing U.S. LNG exports to help displace dirtier fuels abroad and lower greenhouse gas emissions. The Partnership to Address Global Emissions, or PAGE, will help develop and promote policies aimed at developing the infrastructure needed to increase liquefied natural gas production and exports.

The partnership has four objectives, including replacing foreign coal with U.S. natural gas, helping to meet emissions targets under the Paris Agreement, solidifying the security needs of U.S. allies, and increasing energy supplies to limit inflationary impacts. EQT, TC Energy and Williams are PAGE's founding members. Think tanks, including the Progressive Policy Institute, trade unions and academia, would serve on an advisory council and provide guidance to the coalition and its members.

U.S. LNG production and exports have increased exponentially since 2016, when they began from the Lower 48 states. The Energy Information Administration forecasts U.S. LNG exports to average 11.2 billion cubic feet per day in 2022, a 14% boost from 2021. LNG exports are expected to average 12.7 bcf per day next year. Peak export capacity is on track to exceed 18 bcf a day by 2025 as more export terminals come online.

Underinvestment added to energy crisis, says Santos CEO

(Sydney Morning Herald; Oct. 9) - The head of one of Australia's largest liquefied natural gas producers said demands to shut down the fossil fuel industry are only adding to Europe's energy crisis and delaying efforts to reach net-zero emissions by mid-century. Kevin Gallagher, the CEO of Santos, said the issue now gripping Britain, where the nation potentially faces energy rationing and three-hour rolling blackouts this winter, was a direct result of underinvestment in the industry.

Countries across Europe are drawing up winter contingency plans against the disruption of flows of gas from Russia because of the war in Ukraine. "The supply constraints we're seeing were already being felt prior to the Russian invasion," Gallagher told an Australian business community event in London. "While the war in Ukraine has inflamed the issue, the structural and policy issues were there long before the war began."

He said the world had an insatiable demand for energy because it "fuels human development, improving living standards and economic prosperity." Global climate targets have been put at risk by the crisis, with several European countries, including Germany, the Netherlands and Austria restarting mothballed coal-fired power plants to end their massive reliance on Russian gas. Gallagher said the situation was a "reminder to us all" of the need to invest in new oil and gas supply while other low-emissions technologies are developed and can be implemented "affordably and at scale."

Fitch Ratings expects 'muted impact' on supply from OPEC+ cut

(Fitch Ratings; Oct. 10) - OPEC+'s decision to cut production quotas by 2 million barrels per day will have a "muted impact" on the oil supply market as actual output cuts will be smaller, Fitch Ratings says in a new report. Saudi Arabia and the UAE will have to

make the largest actual cuts to production, while many other countries, including Nigeria, have some headroom under their quotas to boost production, the report says.

A recessionary economic outlook will lead to lower oil demand, Fitch says, although demand has recently been boosted by switches from gas to oil in energy generation driven by soaring natural gas prices, particularly in Europe and the Middle East. Demand growth has been fairly weak in other sectors. The recent increases in global oil inventories suggest that the market is in a production surplus, the report says.

"We expect OPEC+ to target a broad balance in the oil market by changing production quotas and available crude supplies, although it may become increasingly difficult to achieve a consensus among the members due to demand uncertainties and the recession in large developed markets," Fitch says in its report. "In the medium and long term we expect prices to moderate as geopolitical tensions should eventually ease. ... Oil demand will be increasingly affected by decarbonization of the global economy."

Global reinsurer commits to stop writing policies on new oil fields

(Reinsurance News; Oct . 6) - Global reinsurer Munich Re has committed that as of April 1, 2023, it will no longer invest in or insure contracts or projects exclusively covering the planning, financing, construction or operation of new oil and gas fields, new midstream oil infrastructure and new oil-fired power plants. The large reinsurer has stressed that it "aims to play its part in meeting the targets of the Paris Climate Agreement" by setting ambitious decarbonization targets for its investments, reinsurance transactions and its own business operations.

Further, the reinsurance giant said, starting Jan. 1, 2025, it will require a "credible commitment" to net-zero greenhouse gas emissions by 2050, including corresponding short and mid-term milestones, from integrated oil and gas firms.

Phillips 66 closing 67-year-old California refinery

(San Luis Obispo Tribune (California) column by Santa Maria refinery manager; Oct. 10) - In the mid-1950s Union Oil sent representatives to the central coast of California to find a site suitable for supporting a new refinery. This facility would convert locally produced crude into the gasoline and diesel that would help to power the California economy for decades. In 1955, the Santa Maria Refinery began operations, joining its sister facility in Rodeo, California, to produce fuels the past 67 years.

As part of the evolution of Phillips 66, the Rodeo refinery located in San Francisco Bay will transform itself into one of the largest renewable fuels plants in the world. Upon completion of the project we call "Rodeo Renewed," the refinery will produce 800 million

gallons of renewable diesel, gasoline and jet fuel each year from feedstocks such as used cooking oil, fats, greases and soybean oil.

As we drive to become a leading producer and supplier of renewable fuels in California, changes to our day-to-day operations are inevitable. The regrettable part of this transformation is that the Santa Maria refinery will cease to process crude oil in January 2023. Once the refinery structures have been removed, we will begin work on restoration of the land. The remediated property will provide a buyer with over 1,600 acres of land along the coast to develop for a future use.

Iraqi prime minister candidate says country needs higher OPEC quota

(The Wall Street Journal; Oct. 10) - Iraq can't afford to reduce its oil production as part of a move by OPEC+ to slash output, according to the top candidate for the Iraqi prime minister's post, who said the country needs the money to bolster its floundering economy. The Saudi-led Organization of the Petroleum Exporting Countries and its Russia-led allies agreed last week to cut output by 2 million barrels of oil a day.

Days after the OPEC+ meeting in Vienna, Mohammed al-Sudani, a senior Iraqi politician, said the production cuts mandated by the oil alliance do not work for Iraq. He said Iraq needs to sell more crude to help finance an economic reconstruction after a crippling war with Islamic State and other militants and to sustain the country's large population. Sudani said Iraq needs a bigger share of the alliance's production quotas.

"We will ask OPEC to reconsider the share of Iraq" in the alliance's total output if his political group forms a government, Sudani told The Wall Street Journal on Oct. 7. Sudani, a former labor and social affairs minister, was nominated by a group of mostly Shiite parties backed by Iran as its prime ministerial candidate in July. Sudani's alliance has the majority it needs after its main rival, Moqtada al-Sadr's lawmakers, quit parliament and called for fresh elections. But Sadr is a popular Shiite cleric who opposes Sudani, and his supporters could delay the formation of a new government.

Nigeria says it will decide next year on 3,840-mile gas line to Europe

(Bloomberg; Oct. 10) - An investment decision on a \$25 billion gas pipeline from Nigeria to Morocco that could supply the fuel to Europe will be taken next year, the head of the West African nation's state oil company said. The Nigerian National Petroleum Co. and Morocco's National Office of Hydrocarbons and Mines signed a memorandum of understanding last month that inched the long-gestating project closer to reality.

The line is one of two such initiatives the NNPC is promoting in an effort to capitalize on European demand for new sources of gas after Russia's invasion of Ukraine. "We will

take a final investment decision next year," NNPC Chief Executive Officer Mele Kyari said. Financing discussions are ongoing, he said, without disclosing the institutions interested in backing the 3,840-mile line that would deliver gas to 11 countries along the African coast on its way to Morocco, before connecting to Spain or Italy.

The project will cost \$20 billion to \$25 billion to build and will be constructed in phases, according to Kyari, who anticipates the first segment would take three years to finish and the others five years. Nigeria's gas exports are currently limited to shipments from Nigeria LNG, a joint venture between NNPC and international energy companies including Shell and Eni. Nigeria possesses Africa's largest proven gas reserves at about 200 trillion cubic feet, most of which is untapped, flared or reinjected into oil wells.

Israel, Lebanon settle maritime dispute, opening area to oil and gas

(CNN; Oct. 11) - Israel and Lebanon have reached a historic agreement, leaders on each side said separately on Oct. 11, settling a years-long maritime border dispute involving major oil and gas fields in the Mediterranean. The United States has been trying to broker a deal between the neighboring countries over the 332-square-mile area of the sea that has been under dispute for years.

It includes the Karish oil and gas field and a region known as the Qanaa prospect, which are expected to fall into Israeli and Lebanese waters, respectively, under the deal. Israel has said it would begin extracting oil and gas from Karish and exporting it to Europe imminently. "The final version of the offer is satisfactory to Lebanon and meets its demands and preserved Lebanon's rights of this natural wealth," Lebanon's President Michel Aoun said in a statement hours after receiving Israel's final offer.

Aoun said he hopes the agreement, which is yet to be signed, will be announced "as soon as possible." Israeli Prime Minister Yair Lapid said: "This is an historic achievement that will strengthen Israel's security, inject billions into Israel's economy, and ensure the stability of our northern border." Lebanese Energy Minister Walid Fayyad said the French major TotalEnergies, which owns the contract to explore Lebanese waters, would start working on the Qanaa prospect "immediately."

Europe's food makers among businesses cutting back on gas

(Bloomberg; Oct. 10) - Nestle and its rivals spent two years grappling with pandemicrelated disruptions. Now the world's biggest food companies are bracing for the next threat: a winter with too little natural gas to power their factories. In response, the food makers are pleading their case to policy makers, cutting back on energy use and converting gas-fired plants to oil to keep Europe's shelves filled with staples like cereal, bread and yogurt — even if natural gas supplies dry up. "Some companies will be lobbying governments on where in the hierarchy of energy users they sit," said Will Hayllar, global managing partner at OC&C Strategy Consultants. "They will also take action to guarantee supply, installing their own generators for example," and stockpiling fuel. Companies have been installing burners that can switch to oil from gas, including McDonald's bun-maker Aryzta, whose freezers and bakeries are energy intensive.

The threat to Big Food isn't as existential as to some industries, such as chemical, glass and metal manufacturers. But any increase in costs could squeeze profit margins, given that consumer-goods companies are getting pushback from retailers on raising prices. European food retailers are even more exposed than manufacturers as they have high energy needs and lower margins. Frozen food retailer Iceland has already had its debt downgraded over concerns surging energy costs and falling consumer demand.

Shipping lines moving more toward LNG, biofuels to cut emissions

(Reuters; Oct. 7) - Shipping and commodities firms will commission more ships partly powered by liquefied natural gas next year while ramping up trials for biofuel bunkering as they seek to cut emissions from ship operations, senior executives said this week. The shipping industry is seeking to reduce its reliance on oil as it tries to meet carbon emission reduction targets set out by the U.N.'s International Maritime Organization.

These include the shipping industry cutting carbon emissions 40% from 2008 levels by 2030 and overall greenhouse gas emissions 50% by 2050. LNG, methanol and biofuel are among the more popular alternative fuel options, industry executives said at the Singapore International Bunkering Conference and Exhibition that ended Oct. 6.

Mining company Rio Tinto will bring nine LNG dual-fueled vessels into its portfolio, with the first delivery expected the first half of 2023, said Laure Baratgin, head of commercial operations. The company has also started a one-year biofuel trial as it aims to cut emissions from operations 40% by 2025. Meanwhile, Moller-Maersk, the world's largest container operator, is focused on using methanol. The company announced on Oct. 5 it has ordered six more methanol-fueled vessels, bringing its total order to 19.

Japanese shipping line unveils new wind-assisted bulk carrier

(Nikkei Asia; Oct. 8) - The Japanese marine shipping industry is latching on to new takes on the wind-blown sail as a way to shrink its carbon footprint. Mitsui O.S.K. Lines unveiled a bulk carrier Oct. 7 with a 174-foot-tall "hard sail," about the height of a 20-story apartment building. The sail converts wind energy into propulsive force, helping to decrease carbon dioxide emissions.

The hard sail automatically extends, shrinks and rotates depending on wind speed, wind direction and strain on the base. Sensors on the base and at the top detect wind conditions. The adjustable sail can effectively convert wind blowing from the front, the back or diagonally into propulsive energy. The hard sail is almost 50 feet wide. Fiber-reinforced plastic saves weight, reducing the load on the ship. But the sail is strong enough to withstand gusts of more than 150 miles per hour.

The ship itself is powered mainly by fuel oil and will transport coal to Tohoku Electric Power. Its sail will cut greenhouse gas emissions by 5% for a Japan-Australia voyage and by 8% for travel between Japan and North America's West Coast. The ship appeared in public at a hand-over ceremony at Oshima Shipbuilding in Nagasaki Prefecture. In August, Mitsui O.S.K. ordered its second wind-assisted vessel.