Oil and Gas News Briefs Compiled by Larry Persily June 22, 2020

Global oil stockpiles total 2.7 billion barrels more than in 2013

(Bloomberg commentary; June 20) - Remember negative oil prices and the fear that every storage tank on the planet would fill to the brim? That seems a long time ago, with West Texas Intermediate crude now hitting \$40 a barrel and the buildup of stockpiles poised to go into reverse. The industry heeded the warning and slashed oil production. But if you had hopes for a quick, V-shaped recovery in demand, look away now.

The International Energy Agency published its oil market outlook last week, pushing its quarterly forecast out to the end of 2021 for the first time. It doesn't think demand will fully recover by then. It predicts global demand will still be running about 2 million barrels a day below pre-pandemic levels in the final quarter of 2021, and more than 4% below where it might reasonably have been expected to be in the absence of the crisis.

Though expectations for demand destruction this quarter are starting to look a little less forbidding than they did a month ago as lockdowns are eased, that was clearly the easy part. The last 10% or so of lost demand is looking more difficult to recover. However, the return in demand so far, combined with supply cuts by OPEC+ and producers outside the group — including in the U.S. — has probably brought supply and demand back into balance, and stockpiles will start to be drawn down in the second half of 2020.

But the amount of stored oil that needs to be used before there is room for producers to pump more is huge. Enough of it has gone into storage tanks, caverns, and ships over the past six months to drive every heavy truck in the U.S. around the world five times — if it could all be turned into diesel. By the end of June, global stockpiles are expected to be about 2.7 billion barrels above where they were at the end of 2013.

Oil demand starting to recover, but it will be a slow process

(Bloomberg; June 20) - Traders in London congregate at 4 p.m. every day to buy and sell North Sea oil for half an hour. The "window," as it's known, is where competition between the most powerful players in the market sets the price of Brent crude. Two months ago, every trader wanted to sell cargoes and none were keen to buy. Now the window has transformed into a bull market, where bids outnumber offers 10 to one and prices are surging. The turnaround reflects the most torrid period in the history of oil.

Crude for immediate delivery last week was trading at a premium to forward contracts. It's a telling sign that refiners that saw demand for their products disappear during the lockdown are now willing to pay top dollar to secure supplies for their facilities. China's oil consumption is now back to pre-pandemic levels. It's still down in Italy and Spain, which were badly affected by the coronavirus, but recovering in others, including India, Japan, France, and Germany.

Global demand fell as much as 30% in late March and early April, when governments locked down entire countries. The scale of the rebound is hotly debated, but most say consumption is now 10% to 15% below normal levels, closer to actual production. Oil consumption doesn't have to come back in full as long as OPEC+ continues cutting production sharply. If it manages to make every country stick to its output and demand keeps rising, the world could soon start burning more oil than it produces. The shrinking of bloated stockpiles can be a catalyst for rising prices, but it could be a slow process.

Prices over \$60 could prompt too much oil, disrupt market balance

(Reuters commentary; June 17) - Oil prices are likely to average under \$60 per barrel across the next cycle to ensure that production, especially U.S. shale, remains in line with the slow increase in consumption. Prices above \$60 are not sustainable for long because they encourage too much production, particularly from the U.S., outrunning demand growth. Russia's producers, too, seem to have decided that long-term balance requires Brent prices below \$60, perhaps even \$50, to maintain their market share.

By contrast, Saudi Arabia and some of its close allies still seem to be targeting prices well above this level, perhaps \$70 or more, reflecting their short-term revenue needs. That price gap between Russia and Saudi Arabia caused the breakdown of the original OPEC+ output agreement earlier this year and led directly to the outbreak of the brief price-and-volume war in March and early April. For now, the two major oil exporters have called a truce as they deal with the pandemic's unprecedented hit to consumption.

But the basic production and consumption conditions that triggered the volume war have not disappeared and tensions will re-emerge in the next few years if oil prices climb above \$60. Empirically, \$60, or perhaps a few dollars per barrel lower, can be identified as the critical price threshold for supply-demand balance in the oil market over the past decade. To ensure production grows in line with consumption, and is shared equitably and sustainably among the three top suppliers — the U.S., Russia, and Saudi Arabia — oil prices will likely have to average \$60 or less over the next price cycle.

Renewed coronavirus outbreak could hurt rally in oil prices

(Bloomberg; June 18) - Oil is continuing its price comeback, buoyed by signs of increasing demand as cities worldwide emerge from lockdown. But fears of a second wave of the virus, combined with record-high oil stockpiles in the U.S., are limiting the rally. Top trading houses Vitol and Trafigura Group said global oil demand is recovering rapidly from its historic nadir. They cautioned, however, that a renewed outbreak of the coronavirus is clouding the long-term outlook.

In the U.S., consumption is improving, but the rising number of COVID-19 cases has raised the possibility of lockdowns resuming. Meanwhile, higher prices are prompting some shale producers to restart oil wells just weeks after shutting them. To sustain the rebound, shale companies should avoid investing in new drilling, said Stewart Glickman, an energy analyst at CFRA Research. "The best way to get out of this is to be more disciplined and wait for prices to go back above \$50 and stay higher," he said.

West Texas Intermediate crude has flirted with \$40 a barrel in the rally, a price it has not achieved since early March. Despite staging a remarkable recovery from its crash into negative territory, the U.S. benchmark is still down 36% this year. Meanwhile, American crude inventories rose last week to another record high.

As China stocks up on cheap oil, tankers wait longer to unload

(Bloomberg; June 19) - The cluster of oil tankers off China's coast is growing and the vessels are waiting longer to offload their cargoes amid a lack of onshore storage space after a buying spree earlier this year. The number of oil-laden tankers parked in Chinese waters has swelled since the start of the month with almost 200 ships expected over the course of June, according to vessel-tracking information compiled by Bloomberg and data intelligence firm Kpler. Crude imports surged to a record in May as demand rebounded after the easing of lockdown restrictions.

The congestion illustrates the explosion in purchases by Chinese refiners as the country reopened after shutting down to contain the coronavirus. The rush for cheap crude is overwhelming port infrastructure and storage amid an influx of cargoes from the Middle East, Latin America, Russia, and West Africa. China's oil demand rebounded rapidly from the demand destruction wrought by the outbreak, but there are concerns about a possible second wave of infections after new cases emerged in Beijing.

Chinese crude imports are expected to expand further this month, with Kpler estimating overseas shipments could reach more than 14 million barrels a day. That would be a jump of more than 20% from the record set in May. At least 32 vessels are sitting off the coast, up from around two dozen earlier in the month, with one ship that arrived in May set to take more than four weeks to discharge its full cargo due to limited tank space. That compares with a typical pre-virus wait time of around five days to offload.

Moody's says 2019 could turn out to be world's peak oil year

(Economic Times; India; June 19) - Global oil demand may have peaked in 2019 as COVID-19 has heightened the possibility that behavioral changes such as working and shopping from home may be long-term trends, while renewable energy and electric cars are rapidly reducing the use of fossil fuels, Moody's said in a new report. Renewable energy sales have expanded in some of the biggest economies, even during the pandemic, while transportation demand for fossil fuels will remain muted, Moody's said.

"A structural shift in demand creates greater risk in forecasting the price of oil, undermining the assessment of profitability for new projects by the time oil is produced in the future. This could create stranded assets in the future which do not produce the expected levels of financial returns," said the report, released June 18. Moody's does not expect global GDP to return to its pre-COVID-19 level until the end of 2021.

"If economic growth does not offset the potential behavioral and other changes impacting oil demand, it will take a long time to recover as business and leisure travel will take a long time to revive, while companies adjust to a new normal where commuting is reduced," the report said. Shipping will also suffer on account of reduced trade, fewer cruises and localization of supply chains, it said. The change in behavior and social-distancing norms will prevent low oil prices from stimulating demand.

Saudi Aramco suspends work at two platforms to save money

(Bloomberg; June 17) - The world's biggest oil exporter is hitting the brakes in developing some of its oil and gas deposits, idling two offshore drilling rigs as the coronavirus batters global energy demand. State-run producer Saudi Aramco has suspended work at the two platforms for about a year, according to filings from the contractors. The producer is also delaying a related \$18 billion oil and gas expansion project by at least six months, according to people with knowledge of the situation.

Aramco declined to comment. The pullback marks a rare pause in Aramco's efforts to drill wells, discover fields and expand known deposits to replace the barrels it's pumping from the planet's largest conventional oil reserves. The halt also raises questions about the kingdom's supply of gas, much of which is found in crude reservoirs. Saudi Arabia needs gas to generate electricity and make chemicals.

Cutting back on field development could be a way "to save money in the current situation," said Robin Mills, founder of Dubai-based consulting firm Qamar Energy. "There's no point spending on production where it's not needed." Oil producers worldwide are slashing spending and putting projects on hold as the plunge in prices since last year imperils profits. Major suppliers, including the Saudis, are curbing output in response to the pandemic.

U.K. energy minister confirms 'fracking is over'

(The Independent; UK; June 19) - "Fracking is over" and the government has "moved on," said U.K. Energy Minister Kwasi Kwarteng. The confirmation that Prime Minister's Boris Johnson's administration will not pursue shale gas comes after pilot operations in Lancashire ceased in September 2019 following a national outcry, local opposition, and small earthquakes. Kwarteng made the comments while speaking to the BBC about a new 50-megawatt battery facility outside Manchester that will store renewable energy.

"We had a moratorium on fracking last year and frankly the debate's moved on. It is not something that we're looking to do," Kwarteng said on the BBC program. "We've always said we'd be evidence-backed, so if there was a time when the science evidence changed our minds, we would be open to that. But for now, fracking is over." The government announced the moratorium on fracking after a report determined it was not possible to accurately predict the danger of earth tremors from the process.

The only fracking site in the U.K., Cuadrilla's Preston New Road well in Lancashire, was wound down in October after the work was blamed for earthquakes over the summer, including a 2.9-magnitude event that was felt across the region in August and led to the suspension of operations. The company's license to carry out hydraulic fracturing expired in November and Cuadrilla said at the time that it would not seek a new license. The government's decision not to pursue fracking has been widely welcomed.

North Dakota will use CARES Act money to plug orphaned wells

(Grand Forks Herald, ND; June 19) - The North Dakota Industrial Commission approved the state Department of Mineral Resources to confiscate more than 200 orphaned oil wells from contractors and begin the process of plugging and reclamation. The June 19 order follows approval of \$33 million in federal CARES Act money by the North Dakota Emergency Fund in May, also aimed at reclaiming abandoned wells. The Department of Mineral Resources is seeking approval of an additional \$33 million in CARES Act funds.

The reclamation work is intended to function as a jobs program for the oil industry while it's stalled by the pandemic. The industry is suffering under its largest production drop on record. The Department of Mineral Resources estimated that the plugging and reclamation process will create more than 550 jobs over the next three to six months.

"We've seen an immense amount of support from the service companies wanting to get their employees back in the field and working," said a spokeswoman for the Department of Mineral Resources. Orphaned wells without a functioning operator were historically rare in North Dakota. But as operators cut back during the pandemic, the number of orphaned wells in the state leapt from none to over 400. Most of the wells approved for confiscation have reached the end of their lives, with some dating as far back as 1950. Almost 370 wells were under consideration for confiscation; 239 have been approved.

Large-scale dredging planned for Russia's Arctic LNG

(Barents Observer; Norway; June 17) - Never before has the Arctic seen an industrial expansion of this magnitude. In only few years, volumes of extracted hydrocarbons have grown substantially and shipments across arctic waters have reached unprecedented levels, with more is to come. The Gulf of Ob is the main area for oil and gas development in Russia's Arctic, where natural gas company Novatek operates the Yamal LNG terminal and is building a second liquefied natural gas project nearby.

The local waters are shallow, and large-scale dredging has opened up the area for more ship traffic. In connection with the launch of Yamal LNG, over 22 million cubic yards of sea bottom was removed from the shallow gulf in the summer of 2016. Over the next few years, far bigger volumes will be dug from the bottom of the bay. Novatek intends to open its next major project, Arctic LNG-2, in 2023, and by that time production platforms, big tankers, and other vessels must have easy access.

The Hydrographical Co., a subsidiary of state nuclear power producer Rosatom, is responsible for much of the dredging. Over the next four years, more than 100 million cubic yards of sea bottom will be dredged from the area, a company representative said. That's equal to dredging 10 feet of seafloor from an area 3 miles by 3 miles.

Coal's price advantage over gas hard to overcome in Asia

(S&P Global Platts; June 19) - Record low natural gas prices may have dimmed the appetite for coal in the Americas and in Europe, but it may do little to snatch away the fuel's strong presence in Asia, thanks to the region's limited ability to switch between fuels. While countries like Japan may witness some switching to liquefied natural gas in the power sector, it won't be enough to offset the voracious appetite for coal in countries like China and India, where bulk of the power comes from coal plants.

"There are limitations to coal-to-gas switching in Asia where (gas-fired) cogeneration power plants are less common. The ability for a power utility to switch generating-fuel procurement to take advantage of low gas prices is quite limited. There are limitations in gas storage too," said Matthew Boyle, lead coal analyst at S&P Global Platts Analytics.

While India has been trying to step up the share of gas in its energy mix, consumption is unlikely to move ahead at a pace the government is aiming for as infrastructure and price hurdles erode its competitiveness with cheaper fuels such as coal. And coal-to-

gas switching in India needs to be spurred by governmental policies, since gas would be unable to displace coal on an economic basis, analysts said. This means that India's insatiable appetite for coal is here to stay for now. On June 18, New Delhi kicked off an auction of 41 coal mines for commercial mining. "The majority of industries in India runs on coal. It's difficult for gas to substitute this demand," said an India-based trader.

New federal regulations allow LNG transport in rail tank cars

(Natural Gas Intelligence Daily; June 19) - Federal regulators on June 19 issued a final rule that would allow the bulk transport of liquefied natural gas in specialized rail tank cars in what could prove a boon for small-scale LNG projects across the United States. The Pipeline and Hazardous Materials Safety Administration issued the final rule in conjunction with the Federal Railroad Administration. It is to take effect 30 days after being published in the federal register.

The rule authorizes the transport of LNG in rail cars that have a thicker-steel outer tank that is more resistant to puncturing. The agency also said that the transport of LNG will be subject to tighter operational controls such as enhanced braking requirements, remote monitoring and route analysis. The controversial final rule follows a regulatory process that has been underway since 2018 to develop a framework to transport the fuel. In early 2019, President Trump issued an executive order to speed up that process, which PHMSA said June 19 has been satisfied with the final rule.

Federal regulators approved a special permit last December allowing a New Fortress Energy affiliate to carry LNG by rail from shale fields in Northeast Pennsylvania to the shores of the Delaware River in New Jersey, where the company has proposed an export terminal. Up until Friday, federal regulations didn't authorize the transport of LNG by rail across the U.S. Instead, a waiver had to be granted in each individual case.

Chevron markets its stake in 31-year-old Australia LNG plant

(Bloomberg; June 18) - Chevron will start a sales process for its interest in the North West Shelf project in Australia, one of the nation's first liquefied natural gas export ventures, after receiving a number of inquiries from potential buyers. Chevron has been looking to make cutbacks as the industry grapples with an unprecedented collapse in demand from the coronavirus pandemic. The company said it decided to market its 16.67% stake after receiving unsolicited approaches "from a range of credible buyers."

Analysts estimate that the stake could be worth \$3 billion to \$4 billion, with the value likely reduced after a sharp drop in LNG prices this year. Before the pandemic, valuations had ranged as high as \$6 billion. The facility has five liquefaction trains, with a total production capacity of more than 16 million tonnes per year. Chevron said now

is a good time to consider exiting, as the facility is transitioning from selling gas owned by the partners to opening its services to new suppliers, an arrangement known as tolling.

North West Shelf has been in operation since 1989, and as its foundational gas fields begin to run dry the project has been considering options to sustain output. Operator Woodside Petroleum is keen to see gas from its Browse offshore fields feed into the plant, but has struggled to get the partners to align on that strategy. Chevron also has gas resources in the region that could feed into NWS. The company also holds stakes in two newer LNG export operations in Australia: Gorgon and Wheatstone.

China could overtake Japan as world's largest LNG importer by 2022

(Reuters; June 18) - China may overtake Japan as the world's biggest liquefied natural gas importer earlier than anticipated as China recovers from the coronavirus pandemic, while Japan's economy remains in a slump, Rystad's head of gas research said. Japan's LNG imports fell in May to an 11-year low of 4.5 million tonnes as the pandemic halted economic activity, official data on June 18 showed. That is less than the 5.6 million tonnes China imported in May, ship-tracking data from Refinitiv shows. For June, China is set to import 5.4 million tonnes and Japan 5 million tonnes, the data shows.

"With China expanding its regasification capacity this year and also having a more accelerated (economic) recovery there is a risk a China having higher imports from this year," Rystad's Carlos Torres Diaz said. Rystad now forecasts China to surpass Japan in 2022, at 80.1 million tonnes a year in LNG imports versus 74.3 million tonnes in Japan. Other analysts foresee China overtaking Japan by about 2025.

Japan has been world's biggest LNG importer for decades and the change would signal a major shift in one of the fastest growing energy markets. Japan's energy demand has declined because of an aging population, and LNG use gas dropped as it restarts nuclear reactors, but the coronavirus pandemic caused LNG demand to fall even further. China has mainly contained its outbreak and gas demand has soared with a government push to move consumers from coal-fired power and heating to cut pollution.

IEA warns methane emissions could go up during industry downturn

(S&P Global Platts; June 18) - Methane emissions by the global oil and gas industry could rise rather than fall in the aftermath of the COVID-19 crisis, contrasting with an expected reduction in carbon dioxide emissions, as weak prices and policy shifts hamper efforts to contain the potent greenhouse gas, the IEA said June 18. In its

Sustainable Recovery report responding to the industry downturn, the IEA said it would cost \$15 billion annually to reduce by three-quarters the industry's methane emissions.

Methane, the main component in natural gas, is a more powerful though shorter-lived greenhouse gas than CO_2 . In the upstream industry, methane is emitted from leaks and venting of gas during oil production and processing. After flat-lining last year, global CO_2 emissions are set for a record fall of around 8% this year due to a drastic reduction in energy demand resulting from COVID-19-related lockdowns, according to the IEA.

By contrast, any reduction in methane emissions is likely to be crimped by gas prices that were low even before the COVID-19 crisis, reducing the incentive to reduce waste, along with the possibility of regulators cutting back their watchfulness, the IEA said. "While global emissions of CO₂ will fall this year, a similar reduction in methane emissions from oil and gas cannot be taken for granted. The drop in gas prices means that many reduction and prevention measures are now less cost-effective to deploy."

LNG import terminal in Puerto Rico never asked for FERC approval

(Natural Gas Intelligence Daily; June 19) – The Federal Energy Regulatory Commission has ordered New Fortress Energy (NFE) to explain why it built and brought online a liquefied natural gas import terminal in San Juan, Puerto Rico, without commission approval. The facility was commissioned in April and supplies LNG to industrial users and microgrids via tanker trucks. It also feeds a nearby gas-fired power plant owned by the Puerto Rico Electric Power Authority.

But in a "show cause" order issued June 18, FERC said the facility is subject to its approval under the Natural Gas Act. The commission noted in the order that it has authority over the siting, construction, expansion, or operation of LNG terminals, and said it has previously approved similar facilities in Puerto Rico, a U.S. territory. It is the lead federal agency for approving LNG terminals and cooperates with other state and federal agencies during the permitting process.

The commission ordered New Fortress to explain within 30 days why it did not seek FERC approval for the facility. "I would certainly expect this to have some type of FERC approval," said Brad Williams, at the Houston-based energy consultancy Spitfire Energy Advisors, who has worked on LNG projects in the region. The power authority signed a deal with NFE last year to convert two generating units from diesel to gas, supplied with up to 863,000 gallons of LNG per day, about 70 million cubic feet of natural gas.

Croatia's first LNG import terminal to start up Jan. 1

(Reuters; June 16) - Croatia's floating liquefied natural gas terminal on the northern Adriatic island of Krk will start operating on Jan. 1, 2021, having its full capacity booked for the next few years, Energy and Environment Minister Tomislav Coric said on June 16. "By this project we achieve security of gas supply for Croatia and we contribute to the security of gas supply for the European Union. Due to the higher competition on the gas market we expect that the gas prices in Croatia may fall," Coric said.

The capacity of the Krk LNG terminal could average almost 250 million cubic feet of gas per day. It will be the country's first LNG import facility. According to LNG Hrvatska, the company that runs the project, the terminal's capacity is sold out until October 2023, with the capacity mostly booked until October 2027.

Oman makes progress building largest oil storage facility in Mideast

(Bloomberg; June 17) - Oman's ambitious goal of building the biggest oil storage facility in the Middle East is finally progressing, more than seven years after the Gulf sultanate announced the plan. Oman Tank Terminal Co. (OTTCO) has almost finished building eight tanks to store crude for a new refinery near the town of Duqm on the Arabian Sea. It's now pushing ahead with more storage tanks that could be used by oil companies and traders, according to two people with knowledge of the project. That would increase Duqm's capacity to at least 25 million barrels, according to OTTCO's website.

The facilities could provide an alternative for traders and exporters eager to avoid the Strait of Hormuz, a chokepoint at the mouth of the Persian Gulf that's seen numerous flare-ups in recent years. The Omani facility lies roughly 600 miles from the waterway. The United Arab Emirates port of Fujairah, the region's largest hub with 14 million barrels of commercial storage capacity, is less than 100 miles from Hormuz.

"Crude storage that anybody can use outside the Strait of Hormuz, that can go either east or west, is probably a good thing," said Alan Gelder, vice president for refining, chemicals and oil markets at consultant Wood Mackenzie. Iraq and Kuwait, a coinvestor in the refinery, might see Duqm as an attractive place to park their crude outside the Gulf, he said. Leasing the tanks would provide extra revenue for Oman, whose finances have been battered this year by the virus and fall in oil prices.