

Oil and Gas News Briefs

Compiled by Larry Persily

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[Anadarko cuts costs, plans Mozambique LNG decision next year](#)

(Financial Times; London; June 27) - A consortium led by Anadarko plans to give its investment approval to a large liquefied natural gas export plant in Mozambique in the first half of 2019 after a sharp reduction in costs, the latest move in an investment boom that could transform the country into a major LNG supplier. Anadarko said it has made enough progress in reaching deals with customers, securing government approvals, lining up financing, and preparing for construction to make a decision within 12 months.

Mitch Ingram, Anadarko's executive vice president for deep water, said the company's venture is in a "sweet spot" because the worldwide slowdown in LNG project approvals meant there has been less competition both for customers and for suppliers to build the facilities. He said the project is hitting contractors "at the low end of the cost cycle." The initial development is expected to cost about \$7.7 billion for the gas liquefaction and export plant, plus an unspecified amount for offshore wells and pipelines.

Anadarko and its partners, which include Mitsui of Japan and ONGC Videsh of India, took advantage of the industry slowdown to cut the total cost of the project by \$4 billion, Ingram said. The first phase will have the capacity to export 12.88 million tonnes of LNG per year. EDF of France has signed a 15-year contract to buy from the plant, and Tokyo Gas and Centrica of the U.K. are on board for 20-year purchases.

Other companies are also planning to invest heavily in Mozambique. A consortium led by Eni of Italy last year gave the go-ahead for an \$8 billion floating LNG project called Coral, with a capacity of 3.4 million tonnes per year. ExxonMobil, which bought part of Eni's Mozambique assets last year, is also looking at an onshore LNG plant.

[Qatar looking to invest \\$20 billion in U.S. oil and gas](#)

(Bloomberg; June 26) - Qatar Petroleum, the world's biggest seller of liquefied natural gas, is looking to get even larger, investing \$20 billion in America's oil and gas fields. The investments will be made over five years, CEO Saad Sherida al-Kaabi said in an interview with Bloomberg News in Washington, D.C. They will likely include the Golden Pass LNG gas export project in Texas, being developed with ExxonMobil.

Al-Kaabi said Qatar will probably be announcing a deal in the U.S. "before the end of the year," but he declined to say what it would involve. Qatar is also looking to invest an additional \$5 billion in so-called downstream assets, such as chemicals projects, he

said. “We have a huge growth plan,” al-Kaabi said. “We’re talking to many people and many companies in the U.S.” The state-owned company is looking at both shale and conventional resources in the U.S.

Qatar Petroleum and its partners in Golden Pass are weighing commercial bids from contractors and expect to decide whether to move forward with the project by the first quarter of 2019, he said. “We are very eager to do the project. We think this is a very important project for us, and we believe we’re aligned with ExxonMobil on that.” The final go-ahead will come only after the company secures gas to feed the project. “You can buy gas off the market, but we want to be naturally hedged,” al-Kabbi said.

Golden Pass, at 15.6 million tonnes of annual liquefaction capacity, is one of four fully permitted U.S. LNG projects awaiting a final investment decision from developers.

Sempra signs up contractors for proposed LNG export terminal

(San Diego Union Tribune; June 25) - Sempra Energy is moving on its plans to build another liquefied natural gas export facility, announcing June 25 that two companies have formed a partnership to act as contractors for a proposed liquefaction project near Ensenada, Mexico. Sempra LNG & Midstream selected international energy services company TechnipFMC and Nebraska-based Kiewit as the engineering, procurement and construction contractor at the Energía Costa Azul facility in Baja California, Mexico.

The announcement comes just days after Sempra selected construction giant Bechtel as the prime contractor for its proposed LNG project near Port Arthur, Texas. Along with partners from Japan and France, Sempra is already constructing the \$10 billion Cameron LNG facility in Hackberry, Louisiana, that is expected to go online next year.

Should the Energía Costa Azul liquefaction project go ahead, it would enable San Diego-based Sempra to have LNG export capability on the Pacific Ocean as well as the Gulf. Energía Costa Azul already has an existing regasification facility. Energía Costa Azul ‘s expansion is contingent upon obtaining commitments from LNG customers, completing commercial agreements and securing the necessary permits and approvals, as well as “other factors associated with the investment,” Sempra said.

China tops Japan for gas imports in first five months of the year

(Bloomberg; June 24) - China’s drive for cleaner skies has pushed it past Japan to become the world’s largest buyer of natural gas, a milestone for a nation that wasn’t even importing the fuel 15 years ago. The development underscores how rapidly China is boosting gas at the expense of dirtier fuels like oil and coal to meet President Xi

Jinping's pollution-cutting goals. Governments, especially in the country's northern regions, have forced millions of homes and factories to replace coal boilers with gas.

China imported 7.41 million tonnes of gas through pipelines and aboard liquefied natural gas tankers in May, according to data released June 23 by the General Administration of Customs. That put it at 34.9 million tonnes for the first five months of the year. Japan's LNG-only imports during that period totaled 34.5 million tonnes, according to its Ministry of Finance. This is the first time China's cumulative imports during a year have been higher than Japan's.

China is on track to become the world's biggest LNG importer by 2021 as growth in domestic production and pipelines won't be able to keep pace with its needs, analysts at JPMorgan Chase & Co. said June 15. LNG became the biggest source of China's overseas gas supply most months over the past year. The nation imported 4.15 million tonnes of LNG last month, compared with 3.27 million tonnes by pipeline, but piped gas supplies will get a boost late 2019 when Russia starts up its Power of Siberia pipeline.

IEA forecasts China's gas demand will grow 60% 2017-2023

(Reuters; June 26) - China will become the world's top importer of natural gas next year, boosted by liquefied natural gas purchases, as its superpower economy grows and weans itself off coal-generated energy, the International Energy Agency said June 26. In its Gas 2018 annual report, the IEA said Chinese demand for natural gas will rise by almost 60 percent between 2017 and 2023 to about 13.3 trillion cubic feet a year, including a rise in its LNG imports to 3.3 tcf by 2023 from 1.8 tcf in 2017. The 2023 forecast of 3.3 tcf equates to almost 70 million tonnes of liquefied natural gas.

Total global trade of LNG will rise to 17.8 tcf by 2023 (about 370 million tonnes), from 13.8 tcf last year (almost 290 million tonnes). The IEA expects the United States becoming the second largest LNG supplier in the world by 2023.

China's rise to the top spot next year as an importer of both piped gas and LNG will knock Japan into second place, with the countries plus South Korea continuing to dominate the markets. China, Japan, and South Korea imported 55 percent of the LNG sold last year. When all of Asia is taken into account, LNG sales there comprised 72 percent of the worldwide total.

U.S.-China trade war shadow 'doesn't do anybody any good'

(Bloomberg; June 26) - China Energy Investment Corp. pledged almost \$84 billion in shale gas and chemical manufacturing projects across West Virginia after President Donald Trump's trade mission to Beijing last fall, but when it was time to discuss details

they were a no-show. The CEO of the world's largest power company canceled a visit to a petrochemical conference in Pittsburgh, where the projects were to be discussed, casting doubt on their fate amid an escalating trade war between the U.S. and China.

The U.S. is due to impose tariffs on \$34 billion of Chinese imports on July 6 and Trump has threatened to impose levies on an additional \$200 billion of Chinese goods. That has put in jeopardy some of the \$250 billion in trade deals between U.S. companies and their Chinese counterparts announced in November when relations with the country were warmer, including many non-binding agreements on energy projects.

Among them was an agreement by Sinopec and Alaska to advance the state-led LNG project. Another involved Air Products & Chemicals' plan to form a joint venture with state-owned Yankuang Group to operate an air separation, gasification and syngas clean-up system for a \$3.5 billion coal-to-syngas production facility.

"Everything is in jeopardy," said Barry Worthington, executive director of the U.S. Energy Association, a group of organizations, corporations and government agencies working on energy issues. "We have a shadow now over both investment and trade relations with China and that shadow doesn't do anybody any good."

Gulf Coast LNG developer says trade spat is delaying deals

(Bloomberg; June 25) - The Trump administration's trade dispute with China is delaying one U.S. company's bid to sign long-term natural gas export deals. While liquefied natural gas is excluded from the trade tariffs announced by China in recent weeks, buyers are waiting to see whether the power-plant and heating fuel will be roped into the spat, said Greg Vesey, chief executive officer of Liquefied Natural Gas Ltd.

The developer is in "advanced" discussions to sign 20-year deals for its proposed \$4.35 billion Magnolia LNG export project in Louisiana, but a number of parties have indicated they are waiting to see how the tensions shake out before making final decisions, Vesey said in an interview in Washington, D.C., on June 25. "We're kind of sitting back and waiting for this whole tariff and trade war thing to settle down," he said. "Has that affected the timing of their decision? Absolutely."

While the Trump administration has promoted U.S. LNG as a way for China and other Asian countries to reduce trade imbalances, a recent threat to impose tariffs on steel imports could make U.S. export terminals more expensive to build. The Magnolia project needs long-term contracts for a final investment decision, which Vesey said he hopes to make by the end of the year.

[Trade fight with China could make U.S. LNG less competitive](#)

(Platts; June 26) - President Donald Trump's trade war with China may be just the edge Canadian LNG export developers need as they try to woo Asian buyers and take market share from the U.S. Gulf Coast. At a time when cheap and abundant U.S. shale gas is fueling an unprecedented expansion of liquefaction capacity, China's import demand is surging as the country transitions to cleaner-burning fuels. But escalating trade tensions between Washington and Beijing could give Canada an advantage, global energy leaders said June 26 as the World Gas Conference got underway in Washington, D.C.

"You run the risk of making those (U.S.) projects less competitive," ExxonMobil CEO Darren Woods said. LNG export project developers in British Columbia have long argued that shorter shipment times to Asia make their projects more attractive than Gulf Coast facilities. Because of the U.S.-China trade rift, Wood said, there are now questions that did not exist before for the LNG market. "Right now, we're still in this turbulent time in terms of where exactly this thing lands and settles out," he said.

It's an especially bad time for the U.S. gas industry for the trade dispute to heat up. More than a dozen developers whose projects were expected to make up the second wave of U.S. liquefaction terminals are mulling final investment decisions. Several of those FIDs have been expected later this year and next. In the event of a protracted trade war between the U.S. and China, Canadian gas exports would be particularly attractive since the supply gas will be entirely sourced from Western Canadian shale.

[China nears capacity limit of Central Asia gas pipeline](#)

(Radio Free Asia; June 25) - As China struggles with natural gas shortages, its pipeline system from Central Asia is rapidly running out of capacity. Plans call for utilizing more than 93 percent of the Central Asia-China Gas Pipeline system's capacity this year with increased supplies from Turkmenistan, Uzbekistan, and Kazakhstan to meet China's needs. Deliveries through the three existing strands of the 1,242-mile cross-border network will rise by nearly a third from the 1.36 trillion cubic feet supplied to China last year, according to figures from pipeline officials in Kazakhstan last month.

Boosting the volumes to 1.81 tcf would be perilously close to the system's rated capacity of 1.94 tcf per year, suggesting it could max out in early 2019. The constraint could have serious consequences for China's huge investments over the past decade in Turkmenistan. The isolated country has some of the world's largest gas fields, but it has become wholly dependent on the Chinese market for its gas exports and earnings after a two-year cutoff by Russia and a long-running debt dispute with Iran.

Plans to build a new line to China have been in the works since 2013, but have been subject to repeated delays. The new line from Turkmenistan through Uzbekistan,

Tajikistan, and Kyrgyzstan would carry up to 1 tcf a year to China's western border, but the most recent reports suggest commissioning no sooner than the end of 2022. Some of the squeeze will be eased when Russia completes its massive 2,485-mile Power of Siberia gas pipeline project, scheduled for December 2019.

Ice clears, Yamal LNG carrier travels Northern Sea Route to Asia

(Reuters; June 27) - A landmark Russian Arctic liquefied natural gas shipment has begun its journey through the Northern Sea Route to Asia, marking the delayed start of summer navigation as thawing sea ice clears a shortcut to the world's biggest LNG market. The \$27 billion Yamal LNG plant developed by Russia's Novatek, France's Total, and Chinese partners — despite U.S. sanctions — started exports in December with cargoes moving on ice-class LNG tankers to Europe, not directly to Asia.

From Europe the LNG was transferred to standard tankers for onward shipment to Asia via the Suez Canal or else sold and used in Europe at a time when the Northern Sea Route was shut. Yamal's Vladimir Rusanov tanker marks the plant's first shipment through the northern route, shipping data on Thomson Reuters Eikon shows. The route, which is crucial for Yamal LNG, typically opens for summer navigation from June until November, but severe ice conditions this year delayed the start of deliveries.

The passageway cuts shipping times to Yamal's main customers in Asia by nearly half — to 15 days — saving time and Suez Canal fees incurred on the westward route.

Yamal LNG may set up ship-to-ship transfer sites in Norway

(The Barents Observer; Norway; June 25) – Russia's Novatek might engage in large-scale ship-to-ship reloading of liquified natural gas on three sites in Norway's Arctic. In a letter to the Norwegian Directorate for Civil Protection, Norwegian company Norterminal requested permission to start up operations in partnership with the Russian natural gas producer. According to the letter, obtained by the Barents Observer, Novatek needs the reloading because of a mismatch in its production capacity and LNG shipping capacity.

As the second liquefaction train at Novatek's Yamal LNG project comes into production this fall, the company will not have enough ice-class LNG carriers to handle the work. By establishing ship-to-ship reloading facilities in Norway, Yamal's fleet of powerful ice-class tankers will be able to significantly reduce their sailing distances. Instead of going all the way to western European ports, the costly ships will shuttle to and from Norway's Arctic fjords. Transferring the cargoes to conventional tankers will save time and money.

A Norterminal representative said there still is a way to go before operations can start, and that the company first has to show that it can provide the necessary capacities. Potential volumes are huge, and three sites will be needed, Norterminal said in its letter. There would be up to 15 ship-to-ship operations at each transfer site. The Yamal project has five ice-class LNG carriers at its disposal, with an additional 10 on order. They are far more expensive than conventional carriers.

France's Total on target to become world's No. 2 LNG producer

(Reuters; June 25) - French oil and gas company Total expects the global natural gas market to grow far faster than that for crude oil over the next two decades thanks to booming demand for the cleaner-burning fuel in Asia, an outlook that underpinned Total's recent big investments, CEO Patrick Pouyanne said June 25. Total expects to close a \$1.5 billion acquisition of Engie's liquefied natural gas assets in July, making it the second biggest producer of the fuel in the world behind Shell.

"Over the next 20 years ... we see many scenarios where consumption of gas will grow at a pace of next to 2 percent per year, versus 1 or 1.5 percent for oil," Pouyanne said at the World Gas Conference in Washington, D.C. When Total completes the Engie LNG acquisition, it will have 10 percent of the world LNG market, up from 6 percent now. It will manage 40 million tonnes per annum of LNG volumes.

Pouyanne said Total is investing in the entire gas chain from production to liquefaction and overseas shipping, and selling the fuel for power generation, petrochemicals and transport. He said global demand growth is being driven by low-cost production from U.S. shale fields alongside strong demand in Asia, particularly in China. "When you invest in something like LNG, you're doing it for the next 25 or 30 years," he said.

Execs talk of need to delink LNG pricing from crude oil markets

(Reuters; June 26) - The growing liquefied natural gas market requires a better pricing benchmark to facilitate big-ticket investment decisions and stabilize demand, executives said at an industry conference June 26 in Washington. LNG has traditionally been sold on long-term contracts indexed to oil prices, rather than pegged to any gas index. As crude prices rise for reasons unrelated to gas, there's a risk of price-sensitive LNG buyers being scared off, said executives speaking at the World Gas Conference.

"The sooner they're delinked the better," said Peter Coleman, chief executive of Australia's Woodside Petroleum, speaking on a keynote panel at the conference and referring to linking LNG contracts to crude oil prices. Jack Fusco, CEO of Cheniere Energy, which exports LNG from its Louisiana terminal and pegs its contracts to U.S. natural gas futures, said benchmarking to oil also risks eroding demand in some cases.

“My fear is that if the price — whether it’s the spot price or the oil index price — gets too high, that buyers will look at other forms of energy to meet their needs and we will have real demand destruction,” he said. “I don’t understand the (oil-gas) correlation anymore, it makes no sense,” said Charif Souki, chairman of Tellurian Inc., which is developing a U.S. Gulf Coast LNG facility. Seung-II Cheong, CEO of Korea Gas, said his company, a major LNG buyer, is looking at several contracting options.

New production brings Egypt close to resuming LNG exports

(Bloomberg; June 23) – Egypt’s imports of liquefied natural gas may stop in the fourth quarter, allowing for exports to start early next year as Eni’s Zohr and other fields boost gas production and help to draw more foreign investment, Petroleum and Mineral Resources Minister Tarek El-Molla said. Egypt’s final LNG import tender was issued to cover third-quarter domestic needs. The fourth quarter should be “imports-free,” he said. Egypt’s LNG exports have been minimal the past few years due to a supply shortage.

Egypt has had to import liquefied gas at high costs to meet its energy needs. However, Eni’s discovery of Zohr in August 2015 has the potential to satisfy much of the nation’s demand and may even transform the country into having a surplus of gas supplies. The giant Zohr field will increase its gas production to 1.7 billion cubic feet a day by August from 1.2 bcf, the energy minister said. Egypt’s total output is 6 bcf a day.

Once it has a sufficient surplus, Egypt will start supplying companies that have rights to operate the country’s LNG export terminals, including Shell and Spain’s Union Fenosa, El-Molla said. “First thing we will do once we have a surplus, we will supply our partners with some of those quantities,” he said. The country has adopted a flexible gas-pricing formula to encourage investment and boost supply, he said. Egypt previously paid a fixed price of \$2.65 per 1,000 cubic feet; the price now is in the range of \$3 to \$5.88.

Polish gas distributor may take long-term U.S. LNG deals

(Platts; June 27) - Poland's dominant natural gas producer and distributor PGNiG said June 26 it has signed agreements with two U.S. companies, Port Arthur LNG and Venture Global LNG, for long-term deliveries of liquefied natural gas as the company pursues its strategy of reducing its dependence on Russian pipeline gas supplies. Under the agreements, PGNiG will negotiate the provisions of binding 20-year contracts for the purchase of 2 million tonnes per year of LNG from each company, PGNiG said.

The agreements do not oblige PGNiG to sign final LNG purchase contracts. Under the deals, PGNiG will be able to resell the cargoes at its discretion. CEO Piotr Wozniak

said the deals allow PGNiG to reduce its dependence on Russian pipeline gas, as well as increasing the company's potential to trade LNG on the global market. If PGNiG signs final deals with the two companies, deliveries will start in 2022-23.

Port Arthur LNG is a subsidiary of Sempra LNG & Midstream, owned by the San Diego-based Sempra Energy, which is working toward a decision on the 11-million-tonne-per-year facility. It could be producing by 2023. Venture Global LNG is planning a 10-million-tonne-per-year Calcasieu Pass facility, Louisiana, and 20-million-tonne Plaquemines LNG facility in Plaquemines Parish, Louisiana. Though the company has not taken a final investment decision on either, it has said deliveries could start by 2023.

Commodity trader signs up for more U.S. LNG

(Reuters; June 26) – Switzerland-based commodity trader Trafigura purchased more liquefied natural gas from the United States on June 26, this time from the Freeport project under construction in Texas, taking 1.5 million tonnes over three years. It builds on Trafigura's 15-year LNG deal with Cheniere Energy for supply from its Sabine Pass terminal in Louisiana.

Freeport will deliver the first LNG to Trafigura in July 2020, following completion of the plant's third production unit on Quintana Island near Freeport, Texas, Trafigura said. Under the free-on-board terms, Trafigura retains the flexibility to deliver the cargoes anywhere in the world. Swiss trade houses grabbed a \$10 billion share of the rapidly growing LNG business last year, handling roughly 8.5 percent of all global supply.

Crowley adds more LNG shipping tanks for Caribbean trade

(LNG Industry; June 21) - In response to high customer demand in Puerto Rico, Crowley Fuels has acquired 40 additional 40-foot-long insulated tanks for its Caribbean trade that will be used to supply, transport, and distribute U.S.-produced liquefied natural gas to customers on the island. The addition brings Crowley's fleet to 75 cryogenic ISO tank containers, giving the company the capacity to ship more than 20 million gallons of LNG annually to customers (about 1.6 billion cubic feet of natural gas).

The company said the latest addition of LNG shipping tanks "will ensure greater supply chain inventory" when coupled with the 200,000-gallon-a-day liquefaction plant built by Crowley's partner in Jacksonville, Florida. The LNG tanks are loaded aboard Crowley cargo ships in Jacksonville.

Federal court will look at gas pipeline waterbody crossings

(Platts; June 22) - EQT Midstream Partners said a June 21 federal appeals court ruling affecting a water permit for a portion of its 301-mile Mountain Valley Pipeline was a setback that could delay construction on the line to move 2 billion cubic feet of gas per day out of Appalachia. Industry research firm ClearView Energy Partners said the decision could set back the project by as much as a year, maybe longer.

Any delay would be a blow for producers' push for more takeaway capacity to markets, including LNG export terminals. The company will request a rehearing, spokeswoman Natalie Cox said. The ruling affects stream and wetland crossings along approximately 160 miles of the route in West Virginia. At issue is the project's U.S. Clean Water Act stream and wetland crossing permit issued by the Army Corps of Engineers.

The Sierra Club and other opponents argued the project cannot comply with a permit condition to complete four key waterbody crossings within 72 hours, and they sought a stay of the permit while the court hears their objections. The company countered the 72-hour requirement doesn't apply due to the protective method it plans to use to cross the waterbodies. The 4th Circuit U.S. Court of Appeals on June 21 granted the stay. How the Federal Energy Regulatory Commission responds to the stay also could affect the project's schedule, as the environmental groups will likely seek a broader review of all 594 waterbodies the pipeline will cross. FERC approved the project last year.

Study finds higher methane leakage rate by oil and gas industry

(Washington Post; June 24) - The U.S. oil and gas industry emits 13 million tonnes of methane from its operations each year — nearly 60 percent more than current estimates and enough to offset much of the climate benefits of burning natural gas instead of coal, according to a study published June 21 in the journal *Science*. The higher volumes of gas leaking from across the industry's supply chain would be enough to fuel 10 million homes and would be worth an estimated \$2 billion, researchers said.

The study, led by Environmental Defense Fund researchers and including 19 co-authors from 15 institutions, estimated that the leakage rate from U.S. oil and gas operations is 2.3 percent, significantly higher than the Environmental Protection Agency's estimate of 1.4 percent. While the percentages seem small, methane is a potent greenhouse gas, and the additional emissions would erase the climate advantages of burning gas instead of coal during the period when methane's effects on the climate are most pronounced.

The study used an extensive aerial infrared camera survey of about 8,000 production sites in seven U.S. oil and gas basins and found that about 4 percent of surveyed sites had one or more observable plumes, with two to seven times the methane emissions from average sites. The study recommended that companies install less failure-prone

systems, carry out on-site leak surveys, re-engineer individual components and processes, and deploy sensors at individual facilities and on towers, aircraft or satellites.

Kinder Morgan turns attention to \$2 billion Texas gas pipeline

(Houston Chronicle; June 26) - Pipeline firm Kinder Morgan, intent on dominating natural gas transportation from West Texas' booming Permian Basin, on June 25 announced plans to build a \$2 billion pipeline to deliver gas to Houston, Corpus Christi, and Mexican hubs. It is the company's first major project announcement since pulling out of its massive Trans Mountain oil pipeline expansion project in Canada in the face of intense opposition from environmentalists and British Columbia's provincial government.

The new deal sees Kinder Morgan placing an even greater focus back in Texas, where there is a race underway to build new crude oil pipelines from the Permian to ports and refineries along the Gulf Coast. But the Houston-based company is focused on carrying the associated gas — more than many companies had projected — that is produced from the oil wells.

The proposed 430-mile Permian Highway Pipeline project is being developed with Houston oil and gas producer Apache Corp., which has the option to buy a one-third stake in the pipeline. For now, though, Kinder Morgan is a 50-50 partner on the project with Midland-based EagleClaw Midstream. EagleClaw is financially backed by the New York private-equity giant Blackstone Group.