

# Oil and Gas News Briefs

## Compiled by Larry Persily

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#### **LNG Canada project workforce already at 1,000, toward peak of 7,500**

(Business in Vancouver; Nov. 12) - One year ago the partners behind LNG Canada, led by Shell, formally sanctioned the C\$40 billion project. Today roughly 1,000 workers are on site in Kitimat, B.C., and that's just to set the stage for the main construction phase, which isn't expected to start for another couple of years. "It's definitely buzzing," said Kitimat Mayor Phil Germuth. "The hotels are full, there's another brand new hotel that's being built. There's a brand new 35-unit townhouse development being done."

The LNG project footprint is almost 1,000 acres, about the size of 550 soccer fields. At the north end, a self-contained village that will house up to 4,500 workers is starting to take shape, while at the south end dredging barges are busy scooping up sediment — some of it contaminated from past industrial activities — to deepen the channel for liquefied natural gas carriers. The dredging alone currently employs about 150 workers.

At the main site, a battalion of more than 70 pieces of earthwork machinery — dump trucks, graders, excavators — has already moved about one-third of the 100 million cubic feet of fill needed to prepare the property. On site are 6,000, 130-foot-long steel pilings made in Turkey that will be driven into the ground to support the LNG complex.

In July 2021, liquefaction production modules that will be built in Asia are expected to arrive. That is when most of the trades people will start putting it all together. Peak construction will come between 2022 and 2024, when up to 7,500 people will be employed. The project is designed to produce 14 million tonnes of LNG per year with the potential to double that in a second phase. First exports are planned for 2025.

#### **FERC scheduled to vote this week on four LNG projects in Texas**

(Houston Chronicle; Nov. 16) - Federal regulators appear poised to make decisions on applications submitted by four liquefied natural gas export terminals in Texas. After more than three years of review, commissioners with the Federal Energy Regulatory Commission have placed decisions for the projects on their Nov. 21 meeting agenda.

Three of the projects are new LNG export terminals at the Port of Brownsville in the Rio Grande Valley, while the fourth is an expansion of Cheniere Energy's Corpus Christi LNG terminal. NextDecade, Annova LNG and Texas LNG are seeking to build export terminals on the Brownsville Ship Channel, just a few miles away from the U.S./Mexico border. As part of a planned third stage of expansion, Cheniere is seeking permission

to add seven mid-scale LNG production units to its export terminal that opened a year ago.

Citing safety and environmental concerns, the three Brownsville projects face stiff opposition from a coalition of environmentalists, Native Americans, shrimpers, fishermen, and other opponents working under the banner of Save RGV From LNG. Habitat for endangered species such as the ocelot, jaguardundi and aplomado falcon has remained a particularly thorny issue for the three Brownsville LNG projects.

### **[FERC issues final environmental review for Oregon LNG project](#)**

(The Oregonian; Nov. 15) - The proposed Jordan Cove liquefied natural gas terminal and its 230-mile feeder pipeline in southern Oregon would have some adverse and significant impacts at the Coos Bay site and on 18 threatened and endangered species, according to the Federal Energy Regulatory Commission. The agency issued its final environmental analysis of the divisive gas export project Nov. 15, concluding it would result in “temporary, long-term and permanent impacts on the environment.”

Many of the impacts would not be significant or could be reduced to less than significant levels with mitigation measures, the analysis said, but staff concluded that some would be adverse and significant. The analysis is neither an approval nor denial of the project; that’s up to a vote of FERC’s presidentially appointed commissioners after the analysis goes through a public comment period and incorporates any subsequent revisions. A final order is expected from commissioners on Feb. 13.

Even if Calgary-based Pembina Pipeline wins FERC approval, construction would be contingent on a list of other state, federal, and local approvals — and on the developer lining up customers and financing. Among the impacts cited in the analysis: The U.S. Coast Guard said LNG tankers in the Coos Bay shipping channel would cause delays for other recreational and commercial marine traffic, and workers needed to build the terminal would put major demands on the local housing market.

The pipeline would also cross over 300 waterbodies including the Coos, Rogue, and Klamath rivers and impact more than 2,000 acres of forest, including more than 750 acres of late-stage old-growth forest that provides habitat for the marbled murrelet, the northern spotted owl, and other federally listed threatened and endangered species.

### **[No guarantee that strong LNG growth in China will continue](#)**

(Center for Strategic and International Studies; Nov. 14) - In the first nine months of 2019, China’s liquefied natural gas imports rose by 17 percent. In today’s market environment, that growth rate is seen as weak, underscoring the extent to which the

global LNG market has come to rely on China to soak up excess supply. In just three years, from 2016 to 2018, global LNG supply rose an unprecedented 28 percent, with China absorbing half the new supply. China's LNG imports, which had grown slowly in the early 2010s, almost tripled from 2015 to 2018. But the growth rate is slowing down.

LNG grew alongside China's domestic gas production and piped imports. In fact, from 2015 to 2018, local production grew more than imports (3.1 trillion cubic feet versus an additional 2.2 tcf of imports). One way to look at it is to see domestic gas displacing gas imports. But the more fundamental growth dynamic is gas competing with other fuels. From 2015 to 2018, 80 percent of the growth in Chinese gas demand came from fuel switching — such as gas for coal. This switching is driven by policy and remains partly subsidized. PetroChina continues lose money on its pipeline and LNG imports.

In short, this is the problem for LNG: Chinese growth is indispensable, but LNG in China is up against both domestic gas and pipeline imports. LNG is also competing against other energy sources, and it is so expensive that the country's largest importer loses money selling the fuel. At some point something in this situation will break — and how this dynamic plays out will have profound consequences for global LNG markets.

## [Japanese shipping line teams up for Russian LNG deliveries](#)

(Nikkei Asian Review; Nov. 15) - Japanese marine shipper Mitsui O.S.K. Lines (MOL) is breaking new ground in the Arctic by teaming up with one of Russia's top gas producers to export the fuel through the icy seas, in a venture that promises lower costs but risks running afoul of U.S. sanctions on Moscow. In September, Russia's Novatek and MOL announced plans for ice-breaking tankers to move the fuel along the Arctic coastline to floating storage units that will handle transfers of the gas to conventional LNG carriers.

The project is expected to cost as much as 160 billion yen (\$1.47 billion) with operations to start by 2023. A joint venture will be established, and the Japan Bank for International Cooperation may offer financing. MOL will make the final decision on the investment next year, expecting to take at least a 30 percent stake in the project. Right now the only way to transport LNG from the Arctic is by using ice-breakers tankers, which are notorious for poor fuel efficiency and higher shipping costs.

To solve the problem, MOL and Novatek will construct floating storage units that will transfer LNG from the ice-class ships to conventional carriers. The terminals will be at Kamchatka, in Russia's Far East, and in Murmansk, in the northwest. This will minimize the use of high-cost LNG carriers, saving fuel by traveling a short distance to fill up the floating units with LNG. Fuel-efficient traditional carriers will arrive to collect the LNG for delivery to customers. The enterprise will reportedly save 10 percent on shipping costs.

But fraught relations between Washington and Moscow could complicate the MOL-Novatek deal, especially U.S. sanctions on Russia, stemming from Moscow's

annexation of Crimea in 2014. Novatek is making a dash to develop LNG technology on its own, and wooing corporate Japan could be part of this effort.

### **Papua New Guinea, Exxon ready to start talks over gas project**

(Reuters; Nov. 14) - Papua New Guinea is set to start talks with ExxonMobil to negotiate better terms for the state from the P'Nyang Gas Project, Minister for Petroleum Kerenga Kua said Nov. 15. "All things going well, we can expect to sign a P'Nyang Gas agreement around the end of this month," Kua said in a statement. The project will help feed an expansion of Exxon's 5-year-old PNG LNG plant, in which Australia's Oil Search and Santos are also stakeholders.

The push to extract more benefits from the P'Nyang project is part of a wider effort by PNG's new government — which took office earlier this year — to reap more rewards from the country's mineral and petroleum resources to lift the country out of poverty.

Talks over the Exxon-led project were put on hold earlier this year, when the government sought to revise a separate LNG agreement it has with French energy major Total in which Exxon is also involved. Kua had earlier told Reuters the state would seek "far better" terms for P'Nyang than those with Total. The Total-led project, along with expansion at the Exxon-led facility, would more than double Papua New Guinea's export capacity. The Exxon LNG plant is rated at 6.9 million tonnes per year. The combined cost of the two projects has been reported at \$13 billion to \$14 billion.

### **European Investment Bank will stop financing fossil fuel projects**

(Reuters; Nov. 14) - The European Investment Bank (EIB) said Nov. 14 it would stop funding fossil fuel projects at the end of 2021, a landmark decision that potentially deals a blow to billions of dollars of liquefied natural gas projects. The bank's new energy lending policy, which it said was approved with "overwhelming" support, will bar most fossil fuel projects, including traditional uses of natural gas. "This is an important first step — this is not the last step," said Andrew McDowell, the bank's vice president.

Under the new policy, energy projects applying for EIB funding will need to show they can produce one kilowatt hour of energy while emitting less than 250 grams of carbon dioxide, a move that bans traditional gas-burning power plants. The policy creates risk for the gas industry, which has more than \$200 billion in LNG export projects lining up to go ahead worldwide over the next five years, aiming to provide a cleaner fuel alternative to coal and oil. Under the new policy, gas projects would have to be based on what the bank called "new technologies," such as carbon capture and storage, combining heat and power generation, or mixing in renewable gases with natural gas.

“The EIB’s new financing criteria will make lending to gas projects very difficult,” said Nicholas Browne, a Singapore-based research director with energy consultancy Wood Mackenzie. “In turn this would be a major strategic challenge for companies that have identified gas as the key driver of growth.” The EIB, the biggest multilateral lender in the world, has ambitious goals on sustainability. McDowell said the bank wants to “set the standard” for what it means for a multilateral bank to be aligned with the Paris accord.

### **Higher carbon costs push German utility to rely more on gas**

(Bloomberg; Nov. 15) – Germany’s Uniper is preparing to fire up more gas-fueled power plants as higher costs for carbon allowances have shifted the economics of the power business away from coal. Gas plants also are benefiting from a slump in the price of the fuel, which is down 40 percent from a year ago. Uniper, one of Europe’s largest utilities, will bring back online as much as 3.5 gigawatts of gas plants that were mothballed when market conditions were less favorable. That’s almost a third of its gas-plant capacity.

“Carbon markets have shown they work,” Uniper CEO Andreas Schierenbeck said. “This summer, carbon (certificate) prices were very high and gas is very cheap, very competitive. The logic is clear.” The remarks illustrate the shift in the ever-changing economics of generating electricity. While Chancellor Angela Merkel is moving to phase out the most polluting fossil fuels, emissions in Germany have actually risen in recent years as the government took nuclear plants off the grid, boosting the need for coal.

Now the government is seeking to remove both nuclear and coal plants from the nation’s power supply, eliminating about half of Germany’s generation capacity, while the rise in carbon costs has made it more profitable for utilities to switch on gas plants instead of coal. While the government is seeking to spur renewables to meet its climate commitments, industry executives, energy forecasters and investors say that more gas will be needed for the time being. Gas plants can help balance the grid until there’s enough wind, solar, and battery capacity to ensure supply day and night.

### **Pennsylvania No. 2 in the nation for gas production**

(Pittsburg Business Times; Nov. 15) - Pennsylvania's natural gas production growth rate led the United States in 2018 — and helped set a national record. The U.S. Energy Information Administration said dry gas production rose 12 percent to an average of 83.8 billion cubic feet per day in 2018, the largest percentage increase since 1951 and the highest increase in volume as far as records go back. The daily rate was 96.8 bcf in August 2019, up an additional 11 from a year ago.

While Texas remained the top gas-producing state in the country in 2018, Pennsylvania was just about 10 percent behind at almost 17 bcf a day. Gas output in Pennsylvania is up more than 3,000 percent — 30 times greater — than a decade ago, when the shale gas boom was just getting under way. There were 68,421 producing gas wells in Pennsylvania in 2018. Louisiana and Oklahoma were No. 3 and No. 4 in the nation, each at less than half Pennsylvania's output.

### **Florida city approves \$23 million tax break for small LNG plant**

(The Florida Times-Union; Nov. 12) - A proposed half-billion-dollar plant that could make Jacksonville, Florida, a hub for liquefied natural gas exports to the Caribbean was approved Nov. 12 by a mayor's budget committee for \$23 million in taxpayer incentives. Houston-based Eagle LNG Partners would build the facility on a 200-acre riverfront tract. The city would provide partial refunds of the plant's property taxes over 10 years.

The committee's unanimous action sends the economic development agreement to the city council for a vote. About 10 percent of the project cost would be for construction at the port; the rest would be spent on liquefaction equipment and other components installed at the site. After construction, the facility would create about a dozen jobs at have an average pay of \$85,000 a year. If the project stays on schedule, the plant would be online in 2023. The plant would have the capacity to handle about 135 million cubic feet of gas per day, producing 1.65 million gallons of LNG per day.

The city's part of the economic development deal would be to rebate 50 percent of the property taxes assessed on the development for 10 years. The tax rebates would be capped at \$23 million. The deal would not affect property taxes paid for schools, the St. Johns River Water Management District and the Florida Inland Navigation District.

### **U.S. sanctions on China concern LNG tanker company executive**

(Bloomberg; Nov. 16) – U.S. sanctions against a Chinese shipping giant could have serious consequences for global trade, said the top executive of a tanker company whose joint venture was ensnared by the penalties. Teekay shares fell in September after disclosing that its joint venture to ship Russian liquefied natural gas on ice-breaking vessels was blacklisted by U.S. sanctions. Teekay's partner in the venture was partly owned by a COSCO Shipping unit that was alleged to have carried oil to Iran.

For Teekay CEO Kenneth Hvid, the incident underscored the risk of sanctioning the world's second-largest economy. "If we start completely sanctioning China, which is really what you are doing when you sanction COSCO, then you have real disruption in the world," Hvid said Nov. 14. "Iran is one thing, China is a very different thing." Hvid

said he spent two weeks in Shanghai trying to address the problem, which was ultimately resolved by COSCO changing its ownership structure of the LNG venture.

“This one surprised us,” and wasn’t on Bermuda-based Teekay’s radar as a potential risk, said Hvid. “We were simply collateral damage.” He said it hasn’t deterred Teekay from continuing to work with COSCO. “We feel very confident we have the right partner here and hopeful this doesn’t happen again.” China is the fastest-growing buyer of LNG, becoming a key player in the global market for the heating and power-plant fuel. Though Teekay got its start with oil tankers, LNG now accounts for 80 percent of its business.

### **New \$1.2 billion gas project will allow Tunisia to cut imports 30%**

(Bloomberg; Nov. 12) - Tunisia’s biggest energy project — a long-delayed, \$1.2 billion joint venture with Vienna-based OMV — will start producing natural gas by the end of the year, the country’s industry minister said. Output from the Nawara gas field will enable Tunisia to slash its imports of the fuel by 30 percent and will contribute a full percentage point to the nation’s economic growth rate, said Slim Feriani, minister of industry and small and medium enterprises. The field lies in southern Tataouine province, which provided a backdrop for scenes in the movie “Star Wars.”

The project represents a potential economic and financial watershed for the North African country, which currently imports much of its energy. Tunisia is struggling to revive its economy and push ahead with an International Monetary Fund-backed program that calls for cost-cutting measures. The government had planned for Nawara to start up in 2016, but technical and social issues caused delays.

With an estimated daily production capacity of more than 100 million cubic feet, the Nawara field will boost Tunisia’s gas output by 50 percent starting next year, Feriani said. It will produce enough fuel for Tunisia to export by pipeline to the Mediterranean coast, enabling the country to narrow its trade deficit by 7 percent, he said.

### **Poland will stop taking Russian gas after 2022**

(Reuters; Nov. 15) - Poland’s dominant gas firm, state-run PGNiG, said Nov. 15 it had notified Russia’s Gazprom that it will not renew their long-term deal on gas supplies when the agreement expires after 2022. Poland had said before that it did not plan to buy gas from Gazprom after 2022. However, the 1996 agreement required that the parties formally submit declarations regarding future cooperation three years before the deal expires.

Poland still buys most of the gas it consumes from Gazprom but has taken steps to reduce its reliance on Russian supplies, as it considers the conditions of the deal unfavorable. PGNiG said in a statement that its contracted liquefied natural gas supplies and acquisitions of gas deposits in the North Sea would guarantee security of supplies after 2022. Lithuania already has reduced its imports of pipeline gas from Gazprom.

### **B.C. premier unhappy with high gasoline prices**

(Vancouver Sun; Nov. 12) – British Columbia Premier John Horgan says a new report by the province’s independent energy regulator has failed to explain why gasoline costs more in the province, adding to his worry that consumers are getting gouged. “There is something wrong with the gas market ... and we want to get to the bottom of that,” he said Nov. 12, following release of a report by the B.C. Utilities Commission that could not explain 13 cents a liter (US\$0.37 a gallon) of the price difference for gasoline.

Horgan said he plans to take the issue to Canadian Prime Minister Justin Trudeau. “Why are we paying 13 cents more a liter than anywhere else in the country?” Horgan said. His government is readying legislation that would force oil and gas companies to hand over supply and pricing data to provincial regulators on a regular basis in order to better understand why gas prices can suddenly spike without warning.

That kind of legislation will only result in more delays, as will appealing to Ottawa to intervene, said opposition party leader Andrew Wilkinson, who urged a cut to provincial gas taxes and stronger efforts to boost supply of gasoline from pipelines. The report said oil and gas companies provided inconclusive or conflicting data that explained some, but not all, of the price difference. In another example, Vancouver’s gasoline prices are running 20 cents a liter (US\$0.57 a gallon) higher than in Seattle.