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Ichthys ready to start up as Australia's 6th LNG project since 2014

(Bloomberg; Oct. 15) - The Inpex-operated Ichthys LNG project in northern Australia may load its first liquefied natural gas cargo as soon as this week, sources said, with three more cargoes to follow in November. The shipments would be the first LNG from the \$40 billion project, which was approved for investment in 2012 by Japan's Inpex and its biggest partner, France's Total. Both companies declined to comment Oct. 15. Ichthys will be the sixth big LNG export project in Australia to go online since late 2014.

It's likely some of the four Ichthys shipments are commissioning cargoes, which LNG projects usually export as a test run before commercial deliveries begin. The project will add a new source of supply just ahead of peak winter demand season and may help curb prices that have jumped to the highest since 2014 amid booming Chinese demand and higher oil prices. The S&P Global Platts Japan-Korea Marker for spot LNG traded at \$11.115 per million Btu on Oct. 15, up more than 50 percent since April.

Ichthys has been beset by delays and cost overruns. When construction began in 2012, the project was expected to cost \$34 billion and start at the end of 2016. Inpex in 2015 announced a delay and raised the cost to \$37 billion. Then in 2017, it revealed another timeline, which it also missed. The cost may rise to \$43 billion, according to Sanford C. Bernstein & Co. The plant will take about two years to reach full capacity of 8.9 million tonnes of LNG per year. Inpex owns about 62 percent, while Total holds 30 percent.

Market waits to see if Ichthys LNG start-up goes smoothly

(Bloomberg; Oct. 17) - The expected start-up of a liquefied natural gas export plant in Australia may not offer the sustained supply relief sought in a market entering the peak winter demand season with prices near four-year highs. The Inpex-operated Ichthys project in northern Australia may load its first cargo this week. But even if it sends out its first shipment on schedule, there's no guarantee a steady stream will follow.

"It is not uncommon for a new plant to experience intermittent production due to teething issues during its ramp-up period," Kittithat Promthaveepong, a Singapore-based LNG analyst for FGE, said by email. Ichthys LNG has traveled a long route to arrive at the precipice of its first cargo. The project has been on Inpex's books since 1998, but the Japanese company and its partner, Total, did not approve funding until 2012. It was

expected to cost \$34 billion and start up at the end of 2016. Inpex in May said it would cost \$40 billion. That could rise to \$43 billion according to Sanford C. Bernstein & Co.

A worst-case start-up might be what happened with Chevron's \$54 billion Gorgon LNG plant off northwest Australia. Two weeks after loading its first cargo in March 2016, it had to shut down due to mechanical issues with its cooling system. It didn't ship its second cargo until July of that year. But if Ichthys can ramp up smoothly, it would be a boon for a spot market that's seen prices rise more than 50 percent since April.

Privately held Chinese company plans LNG export project in Djibouti

(Reuters; Oct. 15) - China's privately owned GCL Group Holding has hired senior officials from state oil and gas major CNOOC to fast-track its burgeoning natural gas business, senior GCL officials said. The company is planning a \$4 billion liquefied natural gas export project in the African country of Djibouti and an LNG receiving terminal in east China. GCL operates three power plants in China that burn almost 200 billion cubic feet per year of gas, supplied by the country's state energy producers.

Poly-GCL, the group's majority-owned joint venture with state defense conglomerate Poly Group, last November signed a preliminary pact with the Djibouti government to build a 3-million-tonnes-per-year LNG export project. Poly-GCL is looking to develop gas in land-locked Ethiopia, which neighbors the coastal nation of Djibouti. A 500-mile pipeline would move the Ethiopian gas to the LNG terminal in Djibouti.

Poly-GCL is tapping potential investors and aims for first gas in 2022, said senior industry executives. GCL plans to build an LNG receiving terminal in Rudong county in east China's Jiangsu province, next to a similarly sized facility operated by PetroChina. The Rudong terminal would be the second sizable investment in gas infrastructure led by a private company in China, according to consultancy SIA Energy. In August, gas distributor ENN started China's first privately led import terminal in Zhoushan.

Norwegian, Chinese companies agree to cooperate on energy

(Reuters; Oct. 16) - China's top energy group China National Petroleum Corp. has agreed with Norwegian oil-and-gas company Equinor to cooperate on exploration, renewable energy and carbon-capture technology, company executives said Oct. 16. China and Norway agreed to resume full diplomatic relations in 2016 following a row over the Norwegian Nobel Committee awarding its Peace Prize to jailed Chinese dissident Liu Xiaobo in 2010. Liu died last year while still in Chinese custody.

Under the memorandum of understanding, the companies will explore opportunities in tapping unconventional gas resources in China and also partner in global oil and gas

projects. "Companies like CNPC have a tremendous opportunity linking global gas supply with domestic gas demand," said Al Cook, executive vice president of strategy at Equinor, formerly Statoil, on the sidelines of a Norway-China energy seminar. He did not provide further details.

Zhang Xiangning, a deputy director with CNPC's Foreign Cooperation Administration Department, said Equinor could apply its tight-gas technology to Chinese oil and gas fields like Changqing in north China's Ordos basin, where CNPC wants to boost its reserves. Changqing is China's top gas field and supplies nearly a quarter of the nation's total gas output.

China dramatically cuts back its imports of U.S. oil

(Wall Street Journal; Oct. 15) - U.S. oil exports to China have slowed to a trickle amid the trade spat between the two countries, an abrupt reversal that is upending global crude trade flows and forcing American producers to find new buyers. China was the biggest buyer of U.S. crude in the first half of this year. But in August, U.S. oil exports to China fell to zero, according to tanker tracking data. In September, only 30,000 barrels a day of U.S. oil went to China; the volume was over 350,000 barrels a day up until July.

As China turns down American oil, U.S. producers have found new markets and overall oil exports haven't fallen significantly. But the changes have scrambled the global oil trade, with Russia and Saudi Arabia moving in to replace U.S. oil in China. So far, Beijing hasn't placed tariffs on U.S. crude oil, even as it has imposed them on American liquefied natural gas. Analysts, however, say that the escalating clash over trade between the two nations is the main reason behind the fall in imports.

Chinese companies may be limiting their purchases of U.S. oil in case the trade battle escalates further. "If I buy a tanker of U.S. crude it takes 45 days to get it to China, I don't want to find out midway that U.S. oil is now sanctioned," said Amy Myers Jaffe, an energy expert at the Council on Foreign Relations in Washington. Since September, only one tanker carrying U.S. oil has headed to China. As less U.S. crude flows to China, others are taking America's place, cementing longer-term relationships. Russian exports jumped by nearly 200,000 barrels a day, according to tanker-tracker Kpler.

Government policies cloud development of Tanzania LNG

(Bloomberg; Oct. 15) - Shell and Equinor said they are committed to building a liquefied natural gas export project in Tanzania. However, proposals for the \$30 billion venture, in gestation since 2014, have been clouded by policy uncertainty in Tanzania's resources industry. Investor sentiment toward the East African nation has been sourced

by the government's overhaul of mining legislation that has enabled it to renegotiate contracts. Still, companies in the gas industry maintain they're prepared to move forward.

"For now, the focus is on agreeing to the host government agreement that is to set the legislative, regulatory and fiscal terms for the project," said Shell spokeswoman Sally Donaldson. Before a final investment decision is reached, an engineering study must be conducted that will last about two years and cost hundreds of millions of dollars, she said. Construction of the plant is expected to take as long as five years.

Negotiations on the agreement have been continuing "for some time, and the actual commencement of construction seems to be a long way off," said Jacques Nel, an analyst at NKC Africa Economics in South Africa. "The government's hard-line approach to dealing with large foreign investors in the natural resources sector also puts a dampener on foreign investor sentiment," he said. Equinor, formerly known as Statoil holds the majority of the working interest in offshore Block 2. ExxonMobil, Shell, and London-based Ophir Energy also hold stakes in offshore blocks.

French energy major Total a big player in Russia

(Financial Times; London; Oct. 15) - Total has underscored its commitment to Russia despite international sanctions and geopolitical pressures that have provoked a steady retreat by other energy majors. As some international energy rivals have reduced their exposure to Russia or withdrawn altogether, the French company has emerged as one of the most prominent foreign players in Russia's vast but highly political industry.

"Total has great ambition in this country, we want to be the largest foreign oil and gas player here," company CEO Patrick Pouyanné said Oct. 15 at the launch of a lubricant production plant outside Moscow. "And to do that we need a local plant," he said. Total's biggest exposure to Russia is its 19.4 percent stake in Novatek, the country's second largest gas producer. Novatek is sanctioned by the U.S. in response to Moscow's 2014 annexation of Crimea. The French group also owns 20 percent of Yamal LNG, a \$27 billion liquefied natural gas project in the Arctic run by Novatek, and this summer said it would buy a 10 percent stake in Novatek's proposed \$25 billion Arctic LNG-2 project.

"We have had a huge success in Yamal. Nobody was believing in the project, and now it is a great success," Pouyanné said. "It is good to capitalize on our reputation in the country in order to grow the business." While U.S. and European Union sanctions were designed to cut off Russia's lucrative oil and gas industry from western finance and technology, the restrictions do not affect large parts of the sector. At the same time, some European measures are less stringent than American curbs.

East Timor says refinery, LNG crucial to its economic future

(Wall Street Journal; Oct. 13) - Sixteen years after East Timor won its independence, the government in this tiny nation is gambling on a huge new oil-and-gas complex to secure its economic future. But there is a problem, critics say: If the project falters, a country colonized by Portugal and later occupied by Indonesia could run short of cash and again end up at the mercy of foreign interests, putting its independence at risk.

Officials say the project is crucial to the long-term economic survival of East Timor's 1.3 million people. They say it will bring in badly needed revenue and help the country stand apart from its neighbors, Australia and Indonesia, as well as China. The project could buy East Timor — which shares an island with Indonesia — enough to time to develop new businesses, including tourism and agriculture, the country's acting oil minister says.

East Timor's operating fields will run dry by 2022. The oil-funded sovereign wealth fund that pays for more than four-fifths of government expenditures will run out of cash within a decade unless alternative sources of funding are found or spending cut. Supporters say the oil refinery, gas line from the Greater Sunrise field offshore and onshore gas liquefaction plant and will produce needed revenue. Critics say the risks are too great.

To push the issue, the government agreed to buy a 30 percent stake in the gas field from ConocoPhillips for \$350 million. But it still needs to negotiate with the other jointventure partners to persuade them to pipe the gas to East Timor and put up their share of the costs. The partners, however, have scoffed at the economic viability of sending gas to a new LNG plant in East Timor instead of using existing capacity in Australia.

FERC issues draft EIS for LNG project in Brownsville, Texas

(Kallanish Energy; Oct.15) - The Federal Energy Regulatory Commission on Oct. 12 released a favorable draft environmental impact statement for NextDecade's proposed Rio Grande LNG project and the Rio Bravo Pipeline in South Texas. It's one of three liquified natural gas export projects proposed for the Port of Brownsville, Texas. The public comment period on the draft runs through Dec. 3. A final EIS is expected in April.

"This milestone brings us one step closer to achieving a final investment decision on the Rio Grande LNG project," said CEO Matt Schatzman. Final authorization from FERC could come in July 2019 and a final investment decision is expected in the third quarter of 2019, the company said. NextDecade has not disclosed a price tag for the project, which would include construction of as many as six liquefaction trains over time, totaling 27 million tonnes annual LNG production capacity.

NextDecade is a Houston-based LNG development company that started listing its stock in 2017. A second LNG project proposed for the port, Texas LNG, is on schedule to receive its final environmental impact from FERC in March 2019.

Japan will offer incentives to help shippers move U.S. LNG

(Nikkei Asian Review; Oct. 17) - Japan's government will offer financial incentives to domestic companies to ship liquefied natural gas produced in the United States to other countries in Asia, a policy change that supports President Donald Trump's goal of selling more American energy overseas. Under Japan's current rules, vessels carrying U.S. LNG qualify for subsidies such as discounted trade insurance only if they stop at ports in Japan — the world's biggest buyer of the fuel — before heading elsewhere.

Tokyo plans to remove this requirement, which costs businesses time and money, as early as this year. Prime Minister Shinzo Abe's government sees the move helping expand exports of Japanese energy infrastructure, such as generators and LNG import terminals. Asian demand for LNG is expected to double by 2040 from current levels, the International Energy Agency estimates. Tokyo expects that higher exports of American LNG to Asia will also help the United States reduce its trade deficits.

The financial incentives are provided by Nippon Export and Investment Insurance and the Japan Bank for International Cooperation in the form of halved insurance premiums and low-interest loans. Both government agencies are expected to expand their programs to cover cases in which vessels transport U.S. LNG directly to third countries. The government also plans to extend financial support to projects by Japanese companies to build LNG terminals in other Asian countries.

Booming shale production allows Argentina to cut back LNG imports

(Bloomberg; Oct. 17) – Argentina plans to close a facility for importing liquefied natural gas, according to sources, after booming production from shale deposits in the Vaca Muerta region turned the country into a seasonal exporter. A contract with Excelerate Energy, which has a regasification ship moored at the Atlantic port of Bahia Blanca, will not be renewed when it expires at the end of the month, the sources said. Argentina will continue to import LNG at another facility in Escobar, on the River Plate estuary.

The decision not to renew the decade-old Excelerate contract comes as output from Vaca Muerta, the nation's answer to the Permian Basin, has created an oversupply of gas during the summer. Shale gas production soared to 7.2 billion cubic feet a day in August, more than triple the level seen a year earlier. The government has negotiated pipeline gas exports to Chile to help relieve the oversupply problem.

Colorado to vote on drilling ban within half-mile of homes

(Washington Post; Oct. 16) - A years-long fight over how close oil and gas drilling can safely be to places where people live and work in Colorado is coming to a head with an unprecedented November ballot measure that would ban such operations within at least half a mile of homes, schools, businesses, and waterways. Proposition 112 pits property owners against Fortune 500 companies and neighbor against neighbor. The stakes are immense in the nation's seventh-largest oil producer and fifth-biggest supplier of gas.

Opponents say increased setbacks would put tens of thousands of people out of work and plunge Colorado into a recession. An industry-backed political action committee collected about \$33 million through Sept. 26 to defeat the initiative. That sum, which dwarfed the amount raised by supporters, has made Proposition 112 one of the most expensive referendums in state history.

Proponents argue that drilling pollutes the air and threatens health and safety. Colorado Rising, the committee leading the effort, points to over a dozen fires, explosions, and leaks since 2017 as applications to drill have tripled in the past year and oil flow has hit record highs. The state has 55,000 active wells, almost double from 2007. Current law requires wells set back 500 feet from homes and 1,000 feet from schools. The ballot measure would push that to 2,500 feet and allow municipalities to expand it farther. Both major gubernatorial candidates oppose the measure and say it would effectively ban drilling. Regulators said it would put 85 percent of state and private land off-limits.

Regional airport asks LNG Canada to provide its own terminal

(The Northern View; Prince Rupert, BC; Oct. 13) - The Northwest Regional Airport in Terrace, British Columbia, wants the companies building the LNG Canada liquefied natural gas plant in nearby Kitimat to provide their own airport terminal facilities. With as many as 4,500 workers needed for the project — a figure that could jump to 7,500 — the increase in air passenger traffic can only be handled at the airport if the companies provide their own facilities, said airport general manager Carman Hendry.

Although the airport has just finished an \$18.5 million expansion at its main terminal, tripling the size of its passenger holding area and creating more parking spaces for arriving aircraft, it was designed for organic growth in local and regional traffic and not the crush of the C\$40 billion LNG project, Hendry said. "We've already had discussions with the companies and the intent is not to create any issues for the regional community the airport serves," he said. The Terrace-Kitimat area has about 20,000 residents.

"This can best be handled by having their own terminals," Hendry said. The concept of standalone terminal buildings came about after Terrace airport officials toured the

airport at Fort McMurray, where a flood of oil sands projects vastly increased air traffic. "We saw that having companies use our terminal was not a good idea," Hendry said. "Having their own takes a lot of pressure off." Shell, the lead in LNG Canada, has said work on the gas project will start immediately, with construction to take five years.

LNG Canada go-ahead clears out housing market inventory

(The Northern View; Prince Rupert, BC; Oct. 14) - The LNG Canada project has nearly swept Kitimat's housing market clear of any available property, days after news broke of the project in the British Columbia coastal community. At the end of September, there were 94 properties of all types available, according to the BC Northern Real Estate Board. According to Terrace/Kitimat REMAX managing broker Sheila Love, since the project partners gave the go-ahead Oct. 2, the housing market has changed drastically.

"The inventory in Kitimat is probably down to no more than three or four homes on the market right now, if that," Love said. "Realtors in Kitimat are just run off their feet. They're getting calls from all over from people wanting to submit offers and invest in this area. Now Terrace is getting the overflow because there's a lack of inventory in Kitimat," Love said. "It's crazy times here."

The lack of inventory and rising demand has presented itself to some as an opportunity to hike prices within the first week following the LNG project announcement. Love said some property owners have made incremental increases in their asking prices, while others have doubled theirs. The market for a ready-to-move-in single-family home is estimated at around \$320,000. "It's still affordable to live up here but a lot of people are going to get a great return on their homes. It's a good time to be a seller right now."

Shell works to reduce emissions at gas field that will feed LNG plant

(Reuters; Oct. 16) - At a massive natural gas field in northern British Columbia, Shell is using new technologies and processes to reduce emissions as it addresses public and environmental group concerns that Canada's emerging liquefied natural gas export industry could be a climate time bomb. The Groundbirch project, perched above Canada's richest shale gas deposit some 680 miles northeast of Vancouver, includes four gas plants and 500 wells dotted over an area the size of New York City.

Shell has cut emissions by moving its newest gas processing plant to hydroelectric power and replacing diesel with natural gas for drilling equipment. It is now looking to reduce methane emissions in gas production by using new electric components and a fuel cell trial. Groundbirch will eventually send its gas hundreds of miles west to the C\$40 billion Shell-led LNG Canada export terminal approved this month. Shell has said construction will take about five years.

LNG demand is booming as countries swap out coal plants for gas to reduce pollution. But environmental groups say LNG exports will boost carbon emissions in Canada from gas production and the liquefaction process. They warn this could derail B.C.'s pledge to cut greenhouse gases by 40 percent by 2030 and test Canada's vow to cut emissions nationwide 30 percent from 2005 levels by 2030. There is no way to produce gas without emissions, said Jens Wieting, with Sierra Club BC. "Considering methane leakage, it's very difficult to make any statement that gas is any better than coal."

Voluntary natural gas rationing could last months in B.C.

(CBC News; Canada; Oct. 15) – British Columbia could be feeling the effects of last week's gas pipeline explosion much longer than previously revealed. The province's gas utility, FortisBC, now says it could be months — rather than weeks — before the end of voluntary gas rationing. And it says there could be impacts on some industries through to Christmas and New Year's. It's not clear just how many jobs could be affected.

FortisBC vice president Doug Stout said it all depends on how many cold snaps occur before the pipeline is repaired. "If it starts to get colder and people need to keep some heat on, then we'll go back to curtailing or reducing volumes to industrial customers on the system, which is what we do first," Stout said. The still-unexplained explosion Oct. 9, about 8 miles north of Prince George, severed the main 36-inch gas pipeline in the province, operated by Enbridge. The Transportation Safety Board is investigating.

Given the mystery, a secondary, parallel 30-inch line was depressurized by Enbridge as a precaution. On Oct. 11, after clearance from regulators, Enbridge restarted the line, but only at 80 percent capacity as an added safety measure. Overall, FortisBC has just 40 to 45 percent of the gas that was flowing into the province before the rupture. Shortly after the blast, FortisBC appealed to Lower Mainland residents, universities, and industry to voluntarily cut back consumption. That helped cut demand by 20 percent. Industrial customers remain under restrictions and that is likely to continue.

Permian boom slows down amid shortages of most everything

(Bloomberg; Oct. 16) - The Permian Basin is six years into a boom sparked by advances in drilling that have unlocked a sea of hitherto unattainable oil buried inside a 90,000-square-mile stretch of sedimentary rock straddling Texas and New Mexico. But as the output approaches the level of Iran — the third-largest OPEC member — growth has begun to slow, throttled by shortages of pipelines, workers, power, and roads.

The U.S. has become an energy superpower because of the Permian. The region's crude output has doubled in the last four years, and could rise another 50 percent by

2023, according to industry consultant IHS Markit. That could propel the U.S. past Saudi Arabia and Russia, with far-reaching economic and political implications for everything from America's foreign policy to OPEC's influence in global energy markets.

But the Permian is showing signs of overheating. Sand, which is used to prop open the fractures in rock that allow the oil to flow, has become a precious commodity. Truck drivers command salaries of \$150,000 a year. Getting a child into day care "is like you're scalping tickets to a Rolling Stones concert," said Jessica McCoy, a mother in Midland, Texas. And the region's roads, overwhelmed by the volume of trucks barreling down thoroughfares designed for farm traffic, are among the deadliest in the country.

A shortage of pipelines to transport crude to refineries and tankers on the Gulf Coast threatens to cap production growth at least until next year, when new pipelines start up. Midland can't hire enough police, corrections officers, or school bus drivers because it can't match the salaries of oil companies. Every fast-food restaurant has a "Now Hiring" sign in the window with the exception of McDonald's, which says "Always Hiring."