# Oil and Gas News Briefs
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## Canada approves first LNG project for B.C. coast

(Globe and Mail; Canada; Sept. 27) - The Canadian government has approved construction of a liquefied natural gas export project near Prince Rupert, B.C., subject to an array of conditions to reduce the project's environmental footprint. Environment Minister Catherine McKenna, who announced the Cabinet decision Sept. 27, outlined 190 conditions that Pacific NorthWest LNG must meet before starting construction, including cutting greenhouse-gas emissions nearly 20 percent below the sponsors' original proposal. The federal review was the project's final regulatory hurdle.

Environmentalists have argued the project — and the greenhouse-gas emissions that come with it — would be inconsistent with Canada's climate commitments, while the B.C government has argued the exported fuel would reduce emissions from coal-fired plants in Asia. Environmentalists, First Nations and a group of scientists have warned the terminal would threaten juvenile salmon habitat in the key Skeena River estuary. The venture is led by Malaysia's state-owned Petronas, which now has to decide with its partners whether to proceed despite low prices and an oversupplied global market.

The project would be a huge boost for the B.C. economy. The total cost is estimated at $36 billion by its start-up in 2021, including construction of the liquefaction plant, marine terminal, a 560-mile pipeline and gas field development costs. The 190 conditions cover wetlands management, freshwater fish and fish habitat, marine fish and mammals, migratory birds, human health, cultural heritage sites and long-term environmental monitoring. The project partners are Petronas, Brunei National Petroleum Co., China Petroleum & Chemical Corp., Indian Oil Corp. and Japan Petroleum Exploration Co.

## Next step for Petronas is LNG investment decision

(Financial Post; Canada; Sept. 28) - After more than three years of regulatory review, the sponsors of a proposed liquefied natural gas plant on Canada's West Coast won conditional government approval Sept. 27. Now they have to decide whether to build it. The LNG world has flipped upside down since Malaysia's Petronas submitted its Pacific NorthWest LNG project for environmental approval in 2013. Spot prices for LNG have fallen more than two-thirds as new projects have boosted supply faster than demand.

The industry hasn't approved a new onshore greenfield project like this since December 2013, said Chong Zhi Xin, principal LNG analyst for Wood Mackenzie. "It is a very tough environment. We are entering a period of oversupply and prices for both oil and LNG are low," Chong said by e-mail from Singapore. "To commit to additional capital expenditure for Petronas and its partners over the next few years will be very challenging, especially as budgets are being cut."

Petronas CEO Wan Zulkiflee Wan Ariffin said the company would review the conditions attached to the environmental approval before deciding whether to proceed. The project includes an LNG plant on Lelu Island near Canada's border with Alaska. It would ultimately produce up to 19.2 million tons a year of LNG, about 8 percent of last year's global trade. Global supply capacity is expected to grow by almost half through 2020, at which point it will exceed demand by 29 percent, according to Bloomberg New Energy Finance. So far, only about a quarter of the plant's planned capacity is taken.

## Permit conditions, economics weigh on LNG project decision in B.C.

(Globe and Mail; Canada; Sept. 28) - The consortium behind the liquefied natural gas export project approved by the Canadian government is hesitant about forging ahead even after investing billions of dollars in British Columbia. Pacific NorthWest LNG, led by Malaysia's state-owned Petronas, will need months to examine more than 190 conditions attached to Ottawa's approval of its LNG export project. The company said it needs to review the Canadian Environmental Assessment Agency's 339-page report.

There is uncertainty, however, whether the partners can make the math work. Eurasia Group, a New York-based political risk firm, said Petronas will likely delay a final investment decision until late 2017, and even will then encounter a tough market. The environmental conditions are fairly onerous compared with what many international competitors face, Eurasia group analyst Divya Reddy said. "Petronas is definitely unhappy with the difficulty of the permitting process and it will certainly give Petronas pause, and delays — especially absent a market recovery — are now more likely."

While the federal approval clears the way for construction of the export terminal, the Petronas-led group will need to pare costs just to break even on its operations if LNG prices in Asia stay in the doldrums, industry experts said. But Raymond James analyst Andrew Bradford said Pacific NorthWest LNG still makes sense in the long term when considering security of supply and geographic diversification, despite low prices in the short term. He expects the LNG project will be constructed eventually because the conditions placed on the project are manageable.

## Eni talking with banks to finance LNG project in Mozambique

(Reuters; Sept. 27) - Italian oil firm Eni has approached banks for billions of dollars to finance a huge offshore gas development in Mozambique, a significant step in getting the long-delayed project off the ground, the company and sources said. Eni confirmed it met with bankers in London last week about project financing to develop the Coral field, part of the huge reserves discovered six years ago in the offshore Area 4 field.

"It's running into billions of dollars," one source told Reuters, adding banks were also looking for credit guarantees from foreign governments, including Britain and China. Banks are likely to respond within three to four weeks with terms they are willing to accept, one of the last stages before Eni can make a final investment decision on the project, two sources close to the deal said. Eni said it hoped to announce a decision by the end of this year. Eni has struck a deal with South Korea's Samsung Heavy to provide a floating LNG platform to process the gas, which will be sold to BP.

Some lenders may be concerned about involvement in Mozambique, given recent clashes between opposition guerrillas and government forces and financial scandals. The International Monetary Fund is in Mozambique this week to try to restore trust between the government and international lenders after more than $2 billion in secret loans came to light this year. The IMF has suspended its own lending to the African country, insisting on external scrutiny before resuming financial aid. "The biggest challenge is Mozambique country risk," one of the sources said of the LNG financing.

## Angola LNG close to restart after 2-year shutdown

(Interfax Global Energy; Sept. 26) - The Angola LNG plant is on schedule to restart by the end of September with no delays expected, a company spokesman from Angola LNG Marketing said. The plant, with capacity to make 5.2 million metric tons of LNG per year, has had a troubled history. It briefly returned to operations in May this year after having been shut down since mid-2014 to correct serious design flaws, which had caused fires at the plant that opened in 2013. Further maintenance took until this month.

Before the most recent period of maintenance, the $10 billion plant was exporting an average of about one cargo every 10 days. Chevron, the project's majority shareholder, declined comment. Angola LNG is a joint venture between Chevron (36.4 percent), Angola's Sonangol (22.8 percent), and BP, Eni and Total (at 13.6 percent each). For Angola's state-owned Sonangol, Angola LNG's success is vital to prevent the company from filing for full-blown bankruptcy.

Sonangol has been scoping out potential debt lenders and is undergoing a restructuring that has shed some of its refining assets. "What Angola needs now is to generate a track record of operational performance," said Giles Farrer, research director of global LNG at Wood Mackenzie. Analysts put Angola LNG's breakeven costs at as high as $11 per million Btu because of the significant construction costs. Low global LNG prices mean the plant is now markedly less profitable. But with the capex costs now sunk, the plant can start generating much-needed cash flow.

## Gazprom still talks off adding 3rd train at Sakhalin-2 LNG plant

(Reuters; Sept. 29) - Gazprom said Sept. 29 it plans to launch a third liquefied natural gas production train at the Far East Sakhalin-2 LNG plant in 2021, possibly fed by a newly drilled field, as Russian companies seek to boost their small share of the global market. Sakhalin-2, Russia's sole LNG plant, has two production lines with a capacity of 10 million metric tons of LNG per year. The third train would add an additional 5 million tons. Russia’s second plant, the Arctic Yamal LNG, is scheduled to open next year.

An obstacle to expanding the Sakhalin-2 plant, operated by Gazprom, Shell, Japan's Mitsui and Mitsubishi, is the resource base. Shareholders are considering two options: buying gas from the Sakhalin-1 project led by ExxonMobil and Rosneft or developing new resources — or a combination. The owners of Sakhalin-1, however, are aiming to use their gas to develop their own LNG plant.

If Gazprom cannot negotiate access to the Exxon/Rosneft gas reserves, it would develop its own reserves at the Yuzhno-Kirinskoye field. Vsevolod Cherepanov, a Gazprom board member, said the first exploitation well could be drilled in 2017, with test production to start in 2021 and full operation in 2022. Cherepanov said talks are ongoing with a Chinese company over a drilling platform for Yuzhno-Kirinskoye. In 2015, the United States restricted exports, re-exports and transfers of technology and equipment to the Yuzhno-Kirinskoye field, making it harder to develop.

## Japanese LNG buyer resells first cargo to South Korea

(Reuters; Sept. 26) - Japan's Jera Co., the world's biggest importer of liquefied natural gas, has re-sold an LNG cargo to South Korea, marking the first actual delivery to a customer outside of Japan, a crucial step toward expanding its trading business. Jera agreed to resell about 60,000 metric tons of LNG to the Gwangyang terminal in South Korea for December delivery, Jera's Senior Executive Vice President and Chief Fuel Transactions Officer Hiroki Sato told Reuters in an interview Sept. 26.

The company procured the LNG through one of its three long-term purchase contracts for Indonesian supply, Sato said. "We want to make this an opening move to expand Jera's marketing and trading operations," he said. "We are in talks on similar deals with buyers in Europe and Asia and aim to clinch more deals by the end of the year." The deal was done on a competitive price to Asia's spot market, he said.

Jera, a joint venture of Tokyo Electric and Chubu Electric, has an annual offtake of 40 million tons of LNG. Sato said Jera wants to raise the volume it sells to other firms in Japan and abroad to 3 million to 4 million tons a year by 2030 to offset falling domestic consumption. "We aim to achieve at least 10 percent by 2020, and possibly as high as

20 or 30 percent by 2030.” Jera is a strong proponent of removing destination clauses that prevent buyers under long-term contracts from reselling cargoes to third-parties.

## Democratic U.S. senators want slowdown in export approvals

(Argus; Sept. 26) – A dozen Democratic U.S. senators have asked Energy Secretary Ernest Moniz to slow the department’s authorizations for liquefied natural gas exports until the effects of approved exports are evaluated. None of the senators represent major gas-producing states. Signatories include Al Franken of Minnesota, Elizabeth Warren of Massachusetts and Barbara Boxer of California.

The department has authorized exports equivalent to more than 14 billion cubic feet of gas per day to countries that lack free-trade agreements with the United States, which includes major LNG buyers Japan, China and India. That’s equivalent to almost 20 percent of total U.S. gas production. The senators said high levels of U.S. LNG exports could raise domestic gas prices, hurting consumers and industries that rely on gas and electricity, as well as disproportionately harm states that are not major gas producers.

It is highly unlikely, however, that the U.S. will export anywhere near the volumes approved. Investment in export projects has significantly slowed because of falling oil prices and the worldwide glut of LNG. The first LNG export terminal in the Lower 48 states opened in February, with four more under construction. Multiple other projects are lined up, waiting for export authorizations, environmental reviews and financing.

## Colombia may build second LNG import and regasification plant

(Platts; Sept. 26) - Colombia is moving forward with plans to build a second LNG import and regasification plant to be located near its Pacific coast to ensure adequate gas supplies, Mining and Energy Minister German Arce said. Speaking Sept. 27 to business leaders in the southwestern city of Cali, Arce said the second plant is necessary to ensure "reliability of supply" in western Colombia. The country is self-sufficient in gas, but with reserves in decline it may have to begin imports as soon as next year.

Colombia's first LNG regasification plant is under construction near Cartagena on the Caribbean Coast and will be operational by year-end. The $800 million facility will process up to 350 million cubic feet of gas per day, destined mainly to fuel power plants serving northern and central Colombia. The proposed second plant would be designed to handle 400 million cubic feet per day.

Colombia consumes about 1 billion cubic feet of gas a day, all supplied from its rapidly depleting fields. Promising offshore fields being developed by state-controlled Ecopetrol and partners Anadarko and Repsol are not expected to enter production until 2022, at the earliest, assuming they prove commercially viable. Arce did not give a target date for construction of a second LNG import plant. Power plant owners in the region want the plant online by 2020, at the latest, regulators have told S&P Global Platts.

## LNG charter rates increase as ships travel farther to reach buyers

(Interfax Global Energy; Sept. 27) – LNG tanker charter rates are set to rise as sellers are forced to look farther away to market their cargoes, experts say. Longer journeys will tighten the shipping market, Michael Newman, a shipbroker at Fearnleys LNG, told an LNG conference in London last week. "Sellers of LNG are pushing excess cargoes into new markets, and you see cargoes going from Gladstone [in Australia] to the Middle East and South America. These are much longer shipping distances than planned, and [charter] rates can rise as sellers push into new homes," he said.

Newman expects charter rates to double, from $32,000 per day currently to about $65,000 per day by the start of 2018. This is considered the breakeven cost for ship owners. Low shipping costs and declining demand have created inefficiency in the sector, with vessels being tied up for days or weeks longer than necessary because of misalignments in offloading schedules, Newman said.

"The spot market is very inefficient. … Increasingly, the discharge dates are misaligned with the load dates, and we see a lot of voyages that take a lot longer than optimal," he said. The increase in ships waiting to empty their loads will reduce the number available to charter and will cause rates to rise. Newman said there could be a deficit of up to 40 LNG carriers by 2019 and that rates will rise above $65,000 per day. He expects the shipping industry will move back to favoring term charters rather than single voyages. Vessel owners have been agreeing to one-way charters because of the weak market.

## Converted Jamaican power plant will start burning gas in October

(The Gleaner; Jamaica; Sept. 23) - The 120-megawatt, 13-year-old diesel-fueled power plant in Montego Bay, Jamaica, has been retrofitted to use liquefied natural gas and should be online Oct. 7, producing electricity at about 12 cents per kilowatt hour. In June, Jamaica Public Service was charging residential customers about 21 cents per kilowatt hour. The imported LNG will be held in floating storage offshore, delivered aboard a smaller vessel, regasified and piped 1.6 miles to fuel the power plant.

The $200 million LNG import project developed by New Fortress Energy, which is owned by a New York City-based investment group, is capable of handling 200,000 tons of LNG per year, almost 10 billion cubic feet of gas. Jamaica Public Service spent $22 million to retrofit the power plant. It's the first LNG import project for the Caribbean nation. The contract with New Fortress Energy covers supply and delivery of the fuel.

## Trudeau restates opposition to oil pipeline

(CBC News; Canada; Sept. 24) - "The Great Bear rainforest is no place for a crude oil pipeline and I haven't changed my opinion on that." That was Canadian Prime Minister Justin Trudeau's specific response to a question this week about the proposed Enbridge-backed Northern Gateway pipeline through northeastern B.C. That phrase would suggest Trudeau isn't necessarily opposed to all pipelines through the largest intact temperate rainforest in the world, just those carrying Alberta oil sands production.

Trudeau's Cabinet is facing an Oct. 2 deadline to make a decision on another proposed pipeline in the sensitive region, the Pacific NorthWest LNG project natural gas pipeline. That proposed pipeline would move gas from the Fort St. John near the Alberta border — partially through the same Great Bear rainforest as Northern Gateway — to near Prince Rupert on the B.C. coast, to be liquefied for export to Asia.

## Canada at critical point in First Nations opposition to pipelines

(Calgary Herald columnist; Sept. 27) - The growing opposition to building new pipelines continued to solidify last week with more than 50 First Nations from across North America signing a treaty to work together to block future oil sands pipelines. For a pipeline industry with its fair share of public headaches, this seems like another migraine. But when it comes to energy development, it’s not quite so simple.

There are many conflicting opinions on what should happen next with pipelines, both within indigenous communities, various levels of governments and across Canada. Next week, the Indian Resource Council will host a conference in Calgary that it’s calling “Pipeline Gridlock: A Nation-to-Nation Gathering on Strategy and Solutions.” The plan is to start a conversation about breaking the deadlock over building energy infrastructure, said Steve Buffalo, chief executive of the Indian Resource Council, which represents about 150 First Nations that produce petroleum or have pipelines on their territory.

Buffalo knows it’s a sensitive conversation as some First Nations adamantly oppose pipelines for environmental reasons, while others have their own service companies and joint ventures in the oil sands, generating revenue and creating jobs for their members. Ken Coates, a professor of public policy at the University of Saskatchewan, believes First Nations participation in the energy sector is now at a critical point. Canada “stands to pay a substantial price” in lost jobs and economic development if producers, pipeline firms, First Nations and governments can’t find a common path forward.

## U.S. shale oil producers have cut costs and ready to ‘snap back’

(Wall Street Journal; Sept. 27) - When oil prices began to plunge two years ago, experts predicted U.S. shale producers would be the losers. But the American companies that revolutionized the oil and gas business with hydraulic fracturing and horizontal drilling are surviving the carnage largely unbowed. Though the collapse in prices caused a wave of bankruptcies, total U.S. oil production has only fallen by about 535,000 barrels a day this year compared with 2015, when it averaged 9.4 million barrels.

As the oil markets ponder where production will resume when prices pick back up, one clear answer has emerged: America. Goldman Sachs forecasts the U.S. will be pumping an additional 600,000 to 700,000 barrels of oil a day by the end of next year — making up for every drop lost in the bust. Few predicted that outcome in the fall of 2014, when Saudi Arabia signaled it wouldn’t curb its output to put a floor under crude prices.

Oil pundits predicted that a brutal culling would force higher-cost players known as marginal producers — a group that includes shale drillers — out of the market. But the greatest consequence of the Saudi decision and subsequent price drop is that it has delayed costly oil megaprojects, from deep-water platforms to Canadian oil sands. “The U.S. isn’t the marginal barrel but the most flexible,” said R.T. Dukes, an analyst at Wood Mackenzie. “We’ll be the fastest to snap back.” A big reason U.S. production has been so resilient is that producers found ways to cut costs and enhance efficiencies.