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Sinopec wants to boost LNG imports, domestic shale gas production

(Reuters; April 2) - China's Sinopec Group aims to more than double its liquefied natural gas receiving capacity over the next six years and lift domestic shale gas production by two-thirds by 2020. The plans are part of the state energy firm's efforts for the cleaner-burning fuel to account for half of its total energy supply by 2023. Sinopec will have 2.1 trillion cubic feet of gas supply capacity, which includes both imports and domestic production, by 2023, the group said April 2. It produced almost 1 tcf of gas in 2017.

Sinopec plans to add new LNG import facilities along the east coast to handle a total of 26 million tonnes annually by 2023, up from the current 9 million tonnes. Sinopec will soon formally approve a plan to build a new terminal in eastern Zhejiang province, said Dai Zhaoming, the group's head of development and planning.

Sinopec has also made advances in shale gas with a discovery in southwestern Sichuan province, said Sun Huanquan, general manager of the oil field development division. Sun said it should contribute to Sinopec's target of 350 billion cubic feet of annual shale gas production by 2020. Sinopec operates China's largest commercial shale gas field in Chongqing in the southwest and produced just over 210 bcf last year. A company executive said in February that Sinopec's shale gas business was almost in the red without government subsidies, illustrating the complex geology.

China's expanded environment ministry will take pollution census

(Reuters; March 29) - The number of pollution sources in China has increased by more than half in eight years, the environment ministry said March 29 as it embarks on a nationwide survey to determine the damage done by more than 30 years of untrammeled growth. The announcement from the newly minted Ministry of Ecology and Environment underlines the challenges facing China, in its fifth year of a war on air, water and soil pollution, as it tries crack down on data fraud and improve monitoring.

The government is currently conducting a second nationwide "environmental census" aimed at identifying pollution threats throughout the country. The first was published in 2010. "The goal for the census is to do thorough data collection so that it can reflect the extent of the pollution," Hong Yaxiong, the head of ministry's pollution survey office, told reporters at the first regular briefing since the ministry was created this month. China has been pushing to convert the nation from coal to natural gas to help clean up the air.

The environment ministry absorbed new duties formerly held by the land, water, and agriculture ministries as part of the biggest government shake-up in years. It will also take charge of climate change and carbon emissions. The new census is due to be completed in 2019. According to preliminary estimates, the number of pollution sources now stands at 9 million, including 7.4 million industrial sources, 1 million in rural areas and 0.5 million from urban locations, Hong said. The first census conducted by the National Bureau of Statistics from 2007-2009 uncovered 5.9 million sources of pollution.

Japanese/Chinese-owned icebreaking LNG tanker enters service

(Japan Times; March 29) - Shipping company Mitsui O.S.K. Lines put an icebreaking tanker into service in the Arctic Ocean on March 29 to transport liquefied natural gas from the Yamal LNG plant in Russia's Arctic to Europe, becoming the first Japanese firm to own and operate such a vessel. The Vladimir Rusanov will deliver its LNG from the plant in Sabbeta on the Yamal Peninsula to a port in Rotterdam in the Netherlands.

The vessel, named after a Russian Arctic explorer and geologist, is one of three ice-breaking tankers Mitsui has ordered for the \$27 billion Yamal LNG project led by Russian gas producer Novatek and its French and Chinese partners. The project, which began operations in December and already has shipped 18 cargoes, will be served by a fleet of 15 icebreaking carriers. LNG deliveries to date have gone to Spain, South Korea, India, Jordan, the U.K., and the United States.

The Vladimir Rusanov, jointly owned by Mitsui O.S.K. and a Chinese shipping company, is expected to deliver LNG year-round. During the summer it will sail from the Arctic to East Asia via the Bering Strait. Manufactured by South Korean firm Daewoo Shipbuilding & Marine Engineering, the 980-foot-long, 164-foot-wide vessel is capable of sailing in seas with ice up to seven feet thick.

Small B.C. LNG plant fills 20 40-foot containers for delivery to China

(FortisBC press release; March 29) - China Energy Reserve and Chemicals Group is working with FortisBC to import Canadian liquefied natural gas in small quantities. FortisBC's liquefaction plant in Tilbury, across the river from Vancouver, is filling 20 40-foot-long insulated tanks for shipment to China, each with capacity for about 1 million cubic feet of gas as LNG. More such shipments are being planned throughout 2018 to help China meet the energy needs of its customers for a cleaner fuel.

The Tilbury plant, which opened in 1971 and has been undergoing a \$400 million expansion, shipped its first 40-foot LNG container to China last November as a test project. The expanded plant will be capable of liquefying 30 million cubic feet of gas per day for the domestic marine and highway transportation markets and also for export.

Since its November shipment, FortisBC has been working with prospective Chinese customers on the logistics of delivering small amounts of LNG by container ship. FortisBC delivered two shipments of two containers each to Shanghai earlier this year.

India says it is 'price sensitive' for its LNG purchases

(Live Mint; India; March 29) - Petroleum Minister Dharmendra Pradhan said March 28 that India is a price-sensitive liquefied natural gas customer and will seek reasonable rates as its energy demand grows. This comes against the backdrop of India setting in place a new gas-favored energy architecture, with the first U.S. LNG cargo under a long-term contract from Cheniere Energy's terminal in Sabine Pass, La., expected to reach India's Dabhol terminal March 31.

"We are price sensitive ... (and) want a reasonable price," Pradhan said at a press conference. "It has to be affordable for our consumers." With a glut in global LNG supplies India, the world's fourth-largest LNG importer, has been trying to renegotiate its sales contracts for better terms. It has succeeded at inking renegotiated, money-saving deals with Qatar's RasGas and ExxonMobil. Cheniere Energy has a 20-year contract with state-run GAIL India to supply 3.5 million tonnes of LNG per year.

Indian firms have inked long-term LNG contracts totaling 22 million tonnes per year from multiple suppliers and are exploring different strategies to reduce the final price. India imported 19 million tonnes of LNG in 2016-17. Gas supplies about 6.5 percent of India's primary energy mix, and the government plans to increase gas to 15 percent by 2030. India's gas demand is expected to be driven by the fertilizer, power generation, city gas distribution, and steel sectors.

Canada's only LNG import terminal ran at 4% capacity last year

(UPI; March 29) - The change in the North American natural gas sector means Canadian imports of liquefied natural gas from top suppliers like Qatar are declining, data show. Canada's National Energy Board reported the number of LNG cargoes to the country's only LNG import terminal — the Canaport facility in New Brunswick — is down 88 percent from its peak in 2011.

As gas production in the United States increases, and as pipeline access to supply Canada improves, the country needs to import less LNG from overseas suppliers. Historically, Canada has imported LNG from countries like Qatar, the world's top LNG producer, Norway and Egypt. "North America's natural gas market dynamics have changed," the NEB's report read.

At peak capacity, the New Brunswick terminal brought in an average of 324 million cubic feet of natural gas per day as LNG. That's an average of one LNG carrier every 10 days. Last year, the volume dropped to 39 million cubic feet per day, about 4 percent of the terminal's capacity. The owners of the terminal are looking at spending several billion dollars to add liquefaction and export capabilities to the underused facility, providing an East Coast outlet for North American gas exports.

Shell bets on a future in the power generation business

(Wall Street Journal; March 29) - Shell is on a spree of small but strategic acquisitions in an area that oil companies have long avoided: the power sector. In the past few months, the oil giant has bought a utility, an electric-car charging business and a stake in a solar-power company, part of a broader long-term plan to marry its huge natural gas output with a futuristic utility business. Shell is making a bet it can profit from changes to the power market as renewables begin to play a bigger role.

If all goes to plan over several decades, Shell said it would produce natural gas at the well, use it to generate electricity and then sell power to homes, businesses and electric-vehicle charging stations — a similar model to its oil-rig-to-gas-station petroleum business. It "makes us future proof in a world where electricity becomes the biggest game in town," said Maarten Wetselaar, Shell's head of gas and new energies.

Shell has said it plans to spend between \$1 billion and \$2 billion a year in what it calls its "New Energies" division through 2020 — more than many other large oil companies are setting aside for renewables and electricity generation. The company is building wind farms off Europe's coast and has said future investments could also include gasfired power plants. The moves reflect Shell's need to find an outlet for its prodigious gas output, which grew with the company's \$50 billion acquisition of BG Group in 2016.

Crowley ships first LNG to Puerto Rico from small plant in Florida

(Daily Record; Jacksonville, FL; March 29) - Jacksonville-based Crowley Maritime's LNG group has shipped its first load of liquefied natural gas from its new Eagle LNG Partners liquefaction facility in West Jacksonville, Fla. The 11,000-gallon load of LNG was trucked to the Port of Jacksonville for shipment to Puerto Rico, the company said in a news release. The plant can produce up to 200,000 gallons of liquefied natural gas a day — about 16 million cubic feet of gas.

The plant has a 1-million-gallon storage tank and a system to load the fuel into containers for truck delivery to the port, where Crowley ships will take the LNG to customers in Puerto Rico and the Caribbean. LNG from the new plant also will power Crowley's two new combination container/roll-on roll-off ships. To support fueling the

ships, Eagle LNG and Crowley constructed a dockside LNG fuel depot on Crowley-leased property at the JaxPort Talleyrand Marine Terminal on the St. Johns River.

Glut of Permian Basin natural gas drives price under \$2

(Bloomberg; March 28) - America's most prolific oil field is now its worst market for natural gas. A pipeline shortage that's leaving gas trapped in the West Texas Permian Basin means prices for the fuel there are the lowest of any major U.S. hub, wresting that distinction from Appalachia's Marcellus Shale. Prices for Permian gas, produced alongside oil, have tumbled 30 percent from a year ago, while output rose to a record. The price March 27 was \$1.84 per million Btu — 29 percent below the U.S. benchmark.

All that gas production is creating a dilemma for drillers, who may be forced to curtail oil output if they can't get their gas to market. Producers can burn off some of the gas — a process known as flaring — but state regulators typically won't allow that to happen indefinitely. And as mild spring weather limits demand for the heating fuel, explorers may be giving their gas away, according to broker Ion Energy Group.

In the next three to four weeks, "gas prices in the Permian can go to zero because it's literally a byproduct," said Kyle Cooper, consultant for Ion Energy in Houston. The low-cost crude oil reserves buried in the Permian's layers of shale have drawn producers in droves, but roughly a third of the output from those wells is gas, said RS Energy Group. As gas production surges, pipeline capacity has failed to keep pace.

One emerging outlet for the glut: Mexico. Demand for the fuel has jumped in Mexico's newly deregulated electricity market as a raft of new gas-fired power plants are built. And while companies are developing pipelines from Texas to Mexico, several projects are facing delays south of the border, often due to opposition from indigenous groups.

Dutch plan to close largest gas field due to earthquakes

(Bloomberg; March 28) - Fifty-five years after starting natural gas production from Europe's biggest field, the Netherlands have signed its death warrant. Output from the Groningen deposit will be cut by two-thirds starting October 2022 and stop entirely by 2030 to ensure residents' safety after earthquakes linked to gas extraction, Economy Minister Eric Wiebes said March 29. Gas from the field is used by millions of residents and thousands of businesses in the Netherlands, Germany, Belgium and France.

Tremors have continued to shake the northern Netherlands since 2014, when the government responded by ordering production cutbacks at the field. The latest cap was set at about 760 billion cubic feet a year, equivalent to almost 5 percent of the European Union's total gas demand. Nederlandse Aardolie Maatschappij, a joint venture of Shell

and ExxonMobil, operates the field. The gas is also a major source of revenue for the Netherlands, with proceeds totaling almost 2 billion euros (\$2.5 billion) this year.

The Dutch plan to build a 500 million euro (\$620 million) facility over three years to convert imported gas to the same Btu value to replace Groningen output, the government said. "It's a pity this option wasn't built a few years ago," said Volko de Jong, managing partner of the Global Gas Networks Initiative, a Groningen-based gas industry adviser. "It's smart. It's a wise thing to do." By October 2022, and possibly a year earlier, production will fall below 420 bcf a year as the field moves to a shutdown.

Pennsylvania considers drilling fee increase to hire more regulators

(Platts; March 29) – State environmental regulators are having to work with less to keep up with more, as the pace of oil and gas development in Pennsylvania continues to increase. Despite the growth in gas drilling in the Appalachian Basin shale plays, the Pennsylvania Department of Environmental Protection employs about 30 fewer people than it did a few years ago, Environmental Secretary Patrick McDonnell said. The state set a record for gas output at close to 16 billion cubic per day in the last quarter of 2017.

"One of the challenges we traditionally have is, frankly, a mismatch between the requirements of the work and the funding source," McDonnell said. The department is funded predominantly by permit fees from the exploration-and-production industry. "With the price of natural gas, we've seen reductions over time in the number of drilling permits," McDonnell said. "We're looking right now at an additional fee package in order to make sure we have adequate funding to oversee the industry."

In January, Pennsylvania Gov. Tom Wolf announced a series of proposed reforms to the state's procedures for granting drilling permits, including more than doubling the well permit fees to \$12,500 from \$5,000 per well and asking the state legislature for funding to hire 35 new regulators. The boost in fees — if approved by regulators — is expected to help the department handle the additional responsibilities for overseeing aspects of the oil and gas industry it has taken on in recent years.

J.P. Morgan says efficiencies will push breakeven oil price toward \$50

(CNBC; March 29) - Efficiency improvements from the world's largest oil-producing firms and countries, alongside the rise of U.S. shale output, will see prices slide back to near \$50 a barrel, according to research at investment bank J.P. Morgan. Christian Malek, the head of oil and gas equity research at J.P. Morgan, said the "breakeven" price — where producers just about manage to cover their costs — for OPEC nations and major energy companies would drift back toward \$50 a barrel by the end of next year.

He said the current cover-their-costs price was in the mid-\$60 range, including for nations like Saudi Arabia, Iraq, and Kuwait. However, the bank predicted a "breakeven duel" between the 14-member OPEC cartel and big oil companies would soon "drive a vicious cycle for oil prices, with medium-term pricing likely to gravitate to the low-\$50s." "Everything is gravitating toward \$50 a barrel," Malek told CNBC on March 29.

Although improved exploring and operating efficiencies among big oil companies is one of the main deflationary price pressures, Malek said, the most disruptive influence is likely the continuing rise of U.S. shale production. "Rising U.S. shale output, excessive hedge fund long positions on the futures market, and the uncertain but overdue transitioning of the petro-nations' supply deal all contribute to a fragility of the oil market, which should not be underestimated," Norbert Rucker, head of macro and commodity research at Julius Baer, said in a research note March 29.

Alberta oil competes with grain for railway capacity

(The Canadian Press; March 29) - Alberta Premier Rachel Notley said Canada will continue to have trouble moving grain across the country unless more oil pipelines are built. Moving oil by rail means there are fewer trains to ship grain for export. Grain shipments have been delayed for the second time in four years as railways grapple with a larger-than-expected grain crop. Saskatchewan Premier Scott Moe said grain sellers are struggling to pay their bills because their product isn't moving.

Notley said such transportation bottlenecks will continue as long as grain has to compete with oil for rail capacity. Having oil shipped by rail isn't good for anyone's bottom line, Notley said. "The minute we get (oil and gas products) on to rail, we start selling them at a massive discount," Notley said March 19 in Lethbridge, Alberta. "That's not good. Meanwhile, the other folks that need rail start losing their profit margin because they're having to bid up in order to get access."

Alberta is locking horns with British Columbia over the expansion of the Trans Mountain pipeline that would triple the amount of oil sands production that could move from Alberta to Burnaby's port for shipment overseas. The federal government approved the pipeline expansion in 2016, but the project faces significant opposition in the coastal province. Thousands of people have rallied in protest and the provincial government has raised concerns about the pipeline's possible environmental and economic impact.

Saskatchewan backs Alberta in oil pipeline fight with B.C.

(Calgary Herald; March 29) - Saskatchewan entered the trade war between Alberta and British Columbia, telling the coastal province March 29 that it will consider limits on its own out-of-province oil shipments if B.C. continues its efforts to delay the Trans

Mountain oil pipeline expansion project. "We are giving warning to say we will do what it takes to ensure that this Trans Mountain pipeline that was approved by the federal government is built," said Saskatchewan Premier Scott Moe.

Saskatchewan likely won't be shipping oil on the proposed pipeline expansion between Alberta and British Columbia but is hurt by the project's delay because the discount to Canadian oil relative to U.S. crude is costing the Saskatchewan government \$150 million per year, Moe said. The pipeline is expected to reduce that discount by providing more export opportunities for Canadian oil producers. "I hope it doesn't come to this, but if B.C. blocks pipelines for Canadian oil, Saskatchewan will consider retaliation, including restricted export permits for our oil," Moe said in a Twitter posting.

Saskatchewan's threat to retaliate against B.C. in the pipeline fight further aligns it with Alberta and escalates the threat of an inter-provincial trade war among Canada's three western-most provinces. "It's mostly grandstanding," University of Regina public policy professor Ken Rasmussen said of Saskatchewan's threat to restrict oil shipments. "It's good politics domestically to look like you're all-in on pipelines here in Saskatchewan."