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Oil companies promote gas as cleaner than coal for power generation

(Bloomberg; June 2) - Oil companies that have pumped trillions of barrels of crude from the ground are now saying the future is in their other main product: natural gas, a fuel they're promoting as the logical successor to coal. With almost 200 nations set to hammer out a binding pact on carbon emissions in December, fossil-fuel companies led by Shell and Total say they are refocusing on gas as a cleaner alternative to the cheap coal that now dominates electricity generation worldwide.

That has sparked a war of words between the two industries and raised concern that Big Oil is more interested in grabbing market share then fighting global warming. "Total is gas, and gas is good," CEO Patrick Pouyanne said June 1, in advance of this week's World Gas Conference in Paris. His remarks echoed comments two weeks earlier by Shell CEO Ben Van Beurden, who said his company has changed from "an oil-and-gas company to a gas-and-oil company."

Shell began producing more gas than oil in 2013; Total did it in 2014. ExxonMobil's gas output rose to about 47 percent of total production last year from 39 percent six years ago. Shell, Total, BP and other oil companies said in a joint statement June 1 that they are banding together to promote gas as more climate friendly than coal. "The enemy is coal," Pouyanne said. A key strategy for gas producers to push this agenda is asking governments to levy a price on carbon emissions from power plants. That creates an economic incentive to switch from coal to cleaner options.

Chevron CEO says world needs Gorgon-sized LNG project every year

(LNG World News; June 2) - Chevron is expecting to become one of the world's leading producers of liquefied natural gas in the next five years. "With projects under construction at Gorgon and Wheatstone (in Australia), along with our existing equity shares at Angola LNG and the Northwest Shelf (Australia), we expect to become one of the top 10 LNG suppliers in the world within the next five years," Chevron CEO John Watson said at the sidelines of the World Gas Conference in Paris.

Watson said a major portion of the projected growth in global energy demand will be fulfilled by gas, much of it delivered to market as LNG. Meeting this demand will require the industry to move forward on multiple, geographically diverse projects to ensure sufficient future supplies, he said. "Gorgon LNG will supply just over 15 million tons of

LNG per year." Looking at expected demand growth, he said, "The world will need more than a Gorgon-sized project each year for nearly 10 years to meet projected demand."

IEA reduces global natural gas demand growth to 2% a year

(Reuters; June 4) - Growth in natural gas demand will slow to an average 2 percent a year globally over the next five years, largely due to weaker than expected Asian markets, the International Energy Agency said June 4. Gas demand growth will slow down from the average 2.3 percent recorded over the past 10 years, the agency said in its annual medium-term gas outlook report.

"One of the key and largely unexpected developments of 2014 was weak Asian demand," IEA Executive Director Maria van der Hoeven said. "The experience of the past two years has opened the gas industry's eyes to a harsh reality: In a world of very cheap coal and falling costs for renewables, it was difficult for gas to compete."

Natural gas prices in Asia are linked to oil prices, which have fallen significantly over the past year. In the short term, gas demand will benefit from falling prices, but some Asian countries have decided to focus on coal-fired power generation instead of gas-fired. LNG projects are easy targets for investment cuts as companies cope with low oil and gas prices, the report said, noting they require a lot of capital and have long lead times, so several are likely to be delayed or cancelled. There is little threat to projects already under construction, but new projects will struggle to get off the ground, the IEA added.

No LNG projects in B.C. before 2020, says IEA forecast

(Financial Post; June 3) - In one of the gloomiest forecasts yet for British Columbia's nascent LNG sector, the International Energy Agency says prospects for export projects have "darkened" and deferrals are likely. In a five-year outlook on global demand for natural gas, the Paris-based agency throws cold water on the B.C. government's hopes of being home to three liquefied natural gas projects by 2020.

"Prospects for [Canadian] LNG projects have deteriorated and no plant is expected to be operational over the time horizon of this report," the IEA said this week. The curtailed outlook reinforces what B.C.'s proponents have feared — their window of opportunity to build export projects on the West Coast may be closing. As many as 19 consortiums have proposed export projects, but none has taken a final investment decision.

While a couple of project developers are expected to make an investment decision this year, deferrals are likely if oil and gas prices do not improve, the IEA said. Japan's LNG prices, which are linked to oil prices, have fallen 50 percent in the past 12 months, trading at \$7.12 per million Btu, far lower than the \$10 to \$13 needed for most LNG projects. Global supply is also set to rise 40 percent during the next five years, leading

to a glut that will likely keeping prices lower for longer. Canada's LNG projects suffer from higher capital costs; their remote location is adding to the investment bill.

Low prices will delay U.S. LNG export projects, says industry official

(Bloomberg; June 1) - New liquefied natural gas export terminals risk delays after LNG prices have fallen to five-year lows in Asia and Europe, said Dave McCurdy, president of the American Gas Association. U.S. projects approved or close to final consent will proceed because they have customers and investors, McCurdy said. U.S. plants not yet approved may be delayed because of low prices, as well as higher construction and regulatory costs, while international projects, such as Mozambique, could be postponed.

"Those that are in the queue may have a harder time negotiating a firm contract at this stage," McCurdy said. "Global pricing has a major impact right now." LNG prices to Asia, the biggest consuming region, plunged 40 percent in the past year amid oil's biggest slump since 2008 and as new LNG production plants from Papua New Guinea to Australia come online.

The prospect of U.S. LNG exports is already affecting the negotiation and renegotiation of supply contracts worldwide "because all of a sudden there is competition," McCurdy said. Unlike most traditional LNG supply accords, U.S. contracts have no ties to specific delivery destinations and are linked to natural gas prices at the U.S. Henry Hub delivery point rather than linked to global oil prices.

Total pledges to get out of coal and boost its LNG business

(Bloomberg; June 1) – France's Total plans to raise its production and trading of liquefied natural gas by 2020 and pull out of coal mining as part of a new policy on fossil fuels and climate change. "Total is gas and gas is good," CEO Patrick Pouyanne said June 1. The company plans to produce and trade about 32.5 million metric tons of LNG per year (1.5 trillion cubic feet of natural gas) by 2020, compared to 18.5 million tons currently. Total also intends to charter a dozen LNG tankers for future trading.

The targets could be achieved by completing projects in Australia, Russia and elsewhere, while trading in shale gas exports from the U.S., Pouyanne said at a news conference. Pouyanne made his remarks ahead of the World Gas Conference this week, where promoters are expected to highlight gas as the cleanest burning fossil-fuel compared with coal and oil.

"There will be a profound change in the world energy mix," Pouyanne said. Total will produce more natural gas than crude in the future compared with a 50-50 ratio this year. Total's gas projects under development include Yamal LNG in the Russian Arctic and a possible plant in Papua New Guinea. "I still have a coal business and I have to get out

of it," he said. "I can't say that coal is the enemy of gas and then continue to produce coal like some of my colleagues. I will get out of coal."

Japan could move away from oil toward renewable energy

(Reuters; June 2) - A consultative committee June 1 endorsed the Japanese government's blueprint for the energy mix it hopes to achieve by 2030. While the proposal has attracted controversy over a plan for the return of nuclear energy to generate 20 to 22 percent of the nation's electricity, it's worth noting how it sees the rest of the generating mix. Renewables are set at 22 to 24 percent, LNG at 27 percent and coal at 26 percent.

What's interesting to note is that the return of nuclear power appears mainly to be at the expense of burning crude and fuel oil for power generation. The 2030 plan expects that generation from crude and fuel oil will fall to virtually zero, while natural gas and coal also would lose market share. Given the limited scope for increased hydro generation, the renewables target of 22 to 24 percent assumes that solar and wind will have to quadruple in generating output over the next 15 years. That's an ambitious target.

But it may not be all doom and gloom for LNG and coal producers, as any shortfall in bringing nuclear generation back to 20 to 22 percent of the mix by 2030 will likely be met by LNG and coal, as it's hard to see renewables growing more to take up any slack. The government will open the plan for public comment through July 2, and proposals are expected to be formally approved by the trade ministry around mid-July, a ministry official said. They would then become government policy.

Thailand will import more LNG to offset decline in gas production

(Reuters; June 2) - Thailand's PTT said it plans to negotiate arrangements for the import of liquefied natural gas with several suppliers, including Chevron, to offset a decline in domestic resources and to secure long-term supply. State-controlled PTT also plans to expand its partnership with Qatar Liquefied Gas, a major long-term LNG supplier, PTT chief executive Pailin Chuchottaworn said in a statement released while attending the World Gas Conference in Paris this week.

PTT, Thailand's sole gas supplier, has a 20-year contract to buy 2 million metric tons of LNG a year (about 95 billion cubic feet of natural gas) from Qatar starting this year. PTT has so far not disclosed the firms with which it is in talks for LNG supplies, except for Anadarko Petroleum, operator of the Mozambique gas field in which a PTT unit has a stake. Thailand's domestic gas consumption is expected to average 4.8 billion cubic feet per day this year, with a growth rate of about 3 to 4 percent a year, PTT said.

Natural gas is used for almost 70 percent of Thailand's power generation. About a fifth of its supplies are piped from Myanmar. But imports from Myanmar are likely to fall,

given that Thailand's neighbor is expected to use more of its natural gas resources for its own development. To secure short-term supply, PTT is looking to form partnerships with France's Total and Shell about possibilities to buy LNG from the spot market.

Statoil starting to see return of gas demand growth in Europe

(Reuters; June 2) - Norwegian energy firm Statoil sees some signs of gas demand in Europe recovering after years of decline, particularly in Britain, its chief executive told Reuters June 2. Norway overtook Russia as Western Europe's main gas supplier in the last quarter of 2014 and is ahead in the first quarter of this year, industry data showed.

"For some years we have seen a reduction in the European gas consumption starting with the financial crisis, with coal substituting for gas in the power generation segment, and that has been a very disappointing development for us," Statoil CEO Eldar Saetre said. "There are some positive signs that hopefully will at some point be a turning point for gas," he added, referring to carbon tax introduction in Britain, which has led to gas demand rising in the power sector last year after three years of decline.

Gas demand for power generation in Britain rose last year for the first time since 2010, data from U.K.'s Department of Energy and Climate Change showed.

Algeria diverts gas from Europe to Asian buyers

(Reuters; June 2) - Algeria's state-run energy company Sonatrach expects to continue diverting gas supplies away from Europe toward Asia as it also explores potential new long-term supply deals with South American importers, a top official said. Algeria supplies about one-fifth of Europe's gas needs via pipelines, primarily to Italy, Spain and France, but is also the world's seventh biggest producer of liquefied natural gas, which it exports on tankers around the world.

Sonatrach sees limited opportunities in trading its LNG cargoes on spot markets, focusing instead on its long-term sales model, Sonatrach's executive vice president of marketing Mohamed Rafik Demmak said. And the best bet for that is Asia. "The problem in Europe is a lack of demand, so we can continue to play the arbitrage by reducing pipeline flows and increasing LNG exports," he said.

He said profits from LNG diversions away from Europe were being shared with its longterm customers such as Italy's Eni. Algeria's pipeline gas deliveries to Italy halved several years ago and flows have since not recovered. Eni is Sonatrach's biggest Italian customer. "This profit-sharing mechanism has been quite comfortable and allows us to react to market changes," Demmak said.

Restart of troubled Angola LNG plant comes at tough time in market

(Interfax Global Energy; June 3) - As Angola LNG prepares to restart production at its plant after nearly 20 months out of service, uncertainty hangs over where its cargoes will be sold. Without any mid-term or long-term contracts in place, capacity is at risk of going underused, analysts told Interfax. "As far as I know, there are no LNG contracts in place and it will be difficult to enter into any at the moment," one LNG consultant said, adding that buyers will find it difficult to trust Angola on its promised start date.

The Chevron-led project has hit a series of major setbacks since it first went online in June 2013 — 18 months behind schedule. It suffered gas supply issues, two fires, the collapse of an offshore rig and a piping failure in the flare and relief system that shut down the plant in April 2014. Operations were initially expected to start again in mid-2015, but the scale of repairs needed meant this was put back until the end of the year. Now Angola LNG has confirmed it plans to ship its first LNG in first-quarter 2016.

It will join a crowded market. "Low LNG prices, together with supplies from Australia and Papua New Guinea, will be headwinds for Algeria LNG exports to Asia," said Abhishek Kumar, energy and modeling analyst at Interfax's Global Gas Analytics. "It was already an expensive plant to start off with from the liquefaction standpoint, but including the cost overruns we're talking upwards of \$15 per million Btu to break even. So no matter what, they're going to take a pretty heavy hit," one senior LNG analyst said.

Indian Oil signs interim agreement to buy LNG from Louisiana project

(The Economic Times; India; May 29) – State-owned Indian Oil Corp. May 29 said it had signed an interim agreement to buy 700,000 metric tons per year of U.S.-produced LNG (about 33 billion cubic feet of natural gas) on a long-term contract starting in 2018. The company last year signed a 20-year deal to buy output from the proposed Pacific NorthWest LNG project in British Columbia, with deliveries to start in 2020 — if the project proceeds on schedule.

IOC's interim agreement this month is with Japan's Mitsubishi Corp. for output from the Cameron LNG project under construction in Hackberry, La. Mitsubishi is a partner in the development, managed by Sempra Energy, with cargoes to start up in 2018. IOC business development director D. Sen said the interim agreement will need to be converted into a firm gas sales-and-purchase agreement. "The (LNG) price is indexed to Brent crude," he said.

Maryland LNG opponents go to federal court to stop project

(Baltimore Sun; June 2) - Opponents of a liquefied natural gas export facility in Calvert County, Md., are asking a federal court to halt construction until it can hear their appeal of the project's approval. In a motion filed June 1 with the Court of Appeals for the District of Columbia, lawyers for three environmental groups say residents in the area of the Dominion Cove Point LNG terminal are already suffering from dust, noise and heavy truck traffic during preliminary construction activity.

Dominion, based in Richmond, Va., has said it expects to finish work on the \$3.8 billion LNG export project by 2017 and begin liquefying natural gas piped to the site. The LNG would be loaded on tankers and exported to customers worldwide. According to the opponents' court filing, some residents have moved and others are trying to sell their homes because of the construction disruption and fears for their safety once the LNG facility is operational. Some homes are just a few hundred feet from the facility.

The motion was filed by Earthjustice on behalf of the Patuxent Riverkeeper, Sierra Club and Chesapeake Climate Action Network. The groups contend that the Federal Energy Regulatory Commission violated federal law by failing to consider how the facility would pollute the air and water and contribute to global climate change. Dominion issued a statement June 2 saying it is confident the federal commission's approval will be upheld. Federal and state regulators have rejected opponents' earlier bids to halt the project.

Anti-fracking group opposes LNG projects proposed in Nova Scotia

(Cape Breton Post; Nova Scotia; May 31) - There may be no hydraulic fracturing involved but that hasn't prevented the Nova Scotia Fracking Resource and Action Coalition from voicing disapproval of the province's approval of the proposed Bear Head liquefied natural gas export plant on the Canso Strait. Ken Summers said although the coalition focuses on ensuring that hydraulic fracturing for gas production doesn't take place in Nova Scotia, it is also concerned about greenhouse gas emissions.

"Nova Scotia has legislated targets for greenhouse gas emission reductions, and admirably is on track for meeting those," he said in a press release. "But if built, Bear Head LNG would, by itself, increase greenhouse gas emissions 10 percent over 2012 levels. On top of that, the previously approved Goldboro LNG project would increase greenhouse gas emissions by an additional 18 percent."

The Nova Scotia Fracking Resource and Action Coalition criticized Environment Minister Randy Delorey for not setting conditions that would require significant reductions in greenhouse gas emissions. The Bear Head and Goldboro LNG export projects are each waiting for investment decisions by their respective developers, while needing to nail down gas supplies, customers and financing.

TransCanada reaches gas line agreements with more First Nations

(The Canadian Press; June 1) - TransCanada said it has reached project agreements with three more First Nations in northern British Columbia as part of the effort to build a pipeline across the province to a proposed liquefied natural gas terminal on the coast. Specifics of the agreements were not announced, but TransCanada said they provide

for annual legacy payments over the commercial life of the Prince Rupert Gas Transmission pipeline plus benefits upon signing and at other milestones.

The latest agreements are with the Doig River First Nation, Halfway River First Nation and Yekooche First Nation. TransCanada has previously reached four other agreements with Lake Babine Nation, Nisga'a Lisims Government, Gitanyow First Nation and Kitselas First Nation.

But members of the Lax Kw'alaams First Nation in northwestern British Columbia rejected a \$1.15 billion offer from Malaysia's Petronas, which wants to build the Pacific NorthWest LNG terminal on Lelu Island, south of Prince Rupert, and would contract with TransCanada for the pipeline to serve the LNG plant. Members of the Lax Kw'alaams had raised concerns over the project's potential impact on neighboring Flora Bank, a marine ecosystem and salmon habitat immediately adjacent to Lelu Island.

First Nations increasingly reach deals on economic development

(Vancouver Sun; May 30) - When the Tahltan First Nation in British Columbia agreed in a 2011 referendum to support the Northwest Transmission Line that now runs north from Terrace, B.C., they knew their lives would change forever. The 215-mile power line would open up a vast, relatively untouched region of northwestern B.C. to hydroelectric projects and large-scale mines. A century before, in 1910, the Tahltan had declared they were the sovereign owners of a vast area three times the size of Vancouver Island.

The Tahltan now share in the wealth created by economic development through revenue-sharing and benefit agreements with the B.C. government, as well as with companies on three hydroelectric projects and Vancouver-based Imperial Metals on the Red Chris gold and copper mine. Their experience exemplifies a larger story sweeping British Columbia. It shows that despite a failed treaty-making process — only five treaties have been completed in the past three decades — First Nations are choosing to participate, and wield increasing influence, in the B.C. economy.

As recently as 20 years ago, there were only a handful of industry agreements being signed in the salmon-farming sector, or for minor mining and forestry projects. But a landslide of revenue-sharing and benefit deals with government, Crown corporations and companies have been reached in the past decade. The number of agreements is expected to grow significantly, especially if the nascent liquefied natural gas export sector, government and First Nations can reach successful deals.

Alberta energy-services industry finds work in British Columbia

(Bloomberg; June 2) - Companies that service Alberta's energy industry, battered by the oil market crash, are feeling the love in neighboring British Columbia. Utility and logistics company Atco and drilling-services provider Petrowest are among Alberta bidders on at

least \$45 billion (Canadian) worth of hydroelectric and liquefied natural gas projects in British Columbia set to start or be decided in 2015. Growth has slowed in Alberta, where some oil sands expansion projects are on hold because of depressed crude prices.

Atco is developing a 1,600-person work camp at the \$8.8 billion Site C hydroelectric dam on the Peace River in northeast B.C. Petrowest is among pre-qualified bidders for contracts related to moving earth and building water-diversion tunnels for the dam, which is set to begin construction late this year. "British Columbia has the potential to be the bright light within the energy patch and even within Western Canadian economic development," said Andrew Bradford, an analyst at Raymond James in Calgary.

The Conference Board of Canada forecasts the economy in British Columbia will grow 3.1 percent this year, the fastest among the country's 10 provinces, according to a May 28 report. It expects Alberta to contract by 0.7 percent. Work in British Columbia is already helping Alberta drillers such as Western Energy Services and frackers including Calfrac Well Services partially offset a slowdown across the region after oil prices collapsed by half last year, according to Bradford.

Low oil prices delay Hawaiian Electric's plan to start using LNG

(Pacific Business News; June 3) - Hawaiian Electric does not envision shipping liquefied natural gas to the islands until 2019, two years later than it originally planned, according to filings with state regulators this week. The \$235 million LNG import project, which still needs the approval of the Hawaii Public Utilities Commission, envisions a contract for delivery of 800,000 tons of LNG per year (38 billion cubic feet of natural gas) for up to 15 years. Hawaiian Electric had said shipments would start late 2016 or early 2017.

But the drop in the price of oil has slowed the utility's plan to ship in LNG as a replacement for oil at its power generation plants. Hawaiian Electric still believes that LNG affords an opportunity to reduce customers' electric bills and improve environmental quality. Hawaii has the highest average electricity rates in the nation.

Meanwhile, the state's natural gas utility, Hawaii Gas, is continuing with its plan for bulk LNG shipments at a development cost of up to \$300 million. Hawaii Gas executives said they hope to begin LNG bulk shipments to the state by 2019 if they receive regulatory approval. Hawaii Gas currently distributes to its customers costly synthetic natural gas, made from naphtha at a local plant.

IHS predicts strong growth in natural gas use by trucks and ships

(Houston Chronicle; June 3) - The surge in liquefied natural gas as a transportation fuel for truck fleets and ships could displace oil demand by more than 1.5 million barrels a day by 2030, according to a study by IHS Energy. While 1.5 million barrels of oil may not seem like a large chunk of the 93.6 million barrels a day of global demand in 2015,

according to the International Energy Agency, it only took about 1 million barrels a day in global oversupply in the third-quarter 2014 to contribute to the collapse in oil prices.

IHS said that environmental, technological and commercial factors are combining to make trucking and shipping fleets convert to natural gas as their transportation fuel, despite cheaper oil prices. "The fall of oil prices has diminished much of the glow from what was an overly optimistic market opportunity for natural gas in transportation," said Michael Stoppard, IHS Energy chief strategist for global gas, in the study. "Nonetheless, the shift to greater use of gas in trucks is set to continue," he said.

"It is widely accepted that power generation is the primary growth market for natural gas demand, but gas as a fuel offers a new market with potentially more value," Stoppard said. Truck fleets have high turnover rates, allowing them to transition to LNG and compressed natural gas more quickly than cars. IHS forecasts gas demand in trucks will reach 7.8 billion cubic feet of gas a day by 2030, split between LNG and compressed natural gas. An additional 1.6 bcf a day in demand is expected from ships, IHS predicts.

Investors continue pouring money into oil drilling

(Wall Street Journal; June 1) - Wall Street's plentiful supply of funds to oil drillers helped create the U.S. energy boom. Now that same access to easy money is keeping drillers going, despite oil prices that are languishing around \$60 a barrel. The flow of money has allowed companies to avoid liquidity problems and kept U.S. crude production from falling sharply. Even though more than half of the rigs that were drilling new wells in September have been banished to storage yards, in mid-May nearly 9.6 million barrels of oil a day were pumped across the country, the highest level since 1970.

Helped by a ready supply of money, the flow of oil from the U.S. could keep crude prices low for the remainder of 2015 and beyond. It wasn't supposed to happen this way. As crude prices began to plunge last year, many energy experts predicted a repeat of 1986 when U.S. oil companies lost their funding and the industry collapsed into a years-long bust. Without money, companies had to slow or even stop drilling for the crude that helped create a global glut. Many were forced to sell out or go bankrupt.

But the gloomy scenario of that downturn hasn't played out on a large scale this time. That is because banks, private-equity firms and institutional investors have continued to pour money into the sector. Interest rates remain at historic lows, which creates significant cash in search of good investments. That makes drilling attractive to some investors even though crude prices are \$50 a barrel lower than they were a year ago. Some investors, betting on an oil rebound, regard energy stocks as a relative bargain.