

Oil and Gas News Briefs

Compiled by Larry Persily

October 7, 2021

OPEC+ says ‘hysteria’ over fossil fuels to blame for high prices

(Bloomberg; Oct. 6) - As oil prices push above \$80 a barrel and fears over the global energy crunch grow, some observers say the OPEC+ coalition isn't doing enough to steady the market. For the organization's top official, Secretary-General Mohammad Barkindo, the blame lies elsewhere. Turmoil spreading from natural gas markets shows that the energy transition is impeding vital investment in new oil supply, he said.

"The energy transition is not being handled properly," Barkindo said at the Energy Intelligence Forum on Oct. 6. "And hence we are beginning to see the fallout." Crude prices rocketed on Oct. 4 after the Organization of the Petroleum Exporting Countries and its partners chose to continue increasing oil supplies at a modest pace, even as world oil inventories diminish sharply. But the volatility isn't the fault of OPEC, Barkindo insisted. The group's decision this week to increase supplies gradually shows it's committed to a sustainable market balance, he said.

The fundamental problem in the energy sector lies with the "hysteria" that has gripped thinking about the move away from fossil fuels, shrinking much-needed investment in new production — even in developing countries, he said. "We call on the leading polluters, the leader emitters" to pause and work on sustainable solutions when they gather for the next round of international climate talks in Glasgow next month, he said.

Intense demand for fossil fuels a setback for energy transition

(Reuters; Oct. 4) - Demand for coal and gas has exceeded pre-COVID-19 highs with oil not far behind, dealing a setback to hopes the pandemic would spur a faster transition to clean energy from fossil fuels. Global gas shortages, record gas and coal prices, a power crunch in China, and oil prices at a three-year high all tell one story: Demand for energy has roared back and the world needs fossil fuels to meet most of those energy needs. "The energy transition and decarbonization are decade-long strategies and do not happen overnight," said Cuneyt Kazokoglu, head of oil-demand analysis at FGE.

More than three-quarters of global energy demand is still met by fossil fuels, with less than a fifth by non-nuclear renewables, according to energy watchdog the International Energy Agency. Energy-transition policies have come under fire for the run-up in energy prices. In some places, they are having an impact, such as in Europe where high carbon prices aimed at reducing emissions have made utilities reluctant to switch on

coal-fired plants to alleviate the shortage. In China, policies to reduce emissions have contributed to the government's decision to ration energy to heavy industry.

But much of the rise in energy prices is simply because producers took huge amounts of capacity offline last year when the pandemic led to an unprecedented fall in demand. Producers of gas, coal and to a lesser extent oil have been caught flat-footed by the economic recovery. However, the chief of the Paris-based IEA said energy transition policies were not to blame for the crisis. "Well-managed clean energy transitions are a solution to the issues that we are seeing in gas and electricity markets today — not the cause of them," Fatih Birol said in a statement.

Asia faces choice between investment in fossil fuels or renewables

(Reuters; Oct. 5) - The current energy squeeze has led to record high prices for coal and liquefied natural gas, but what happens once the short-term crisis is over will depend on how importing countries choose to respond, especially those in Asia. At a basic level, energy importers have two options: To increase investments in fossil fuels in order to ensure they always have sufficient supplies, or boost investment in renewables and energy storage in order to reduce reliance on foreign fuels.

LNG has a better story to tell than coal, given companies are still investing heavily in the fuel and the current supply crunch is likely a temporary situation. However, the surge in the spot price for LNG to a record \$32 per million Btu last week will likely again give pause for thought to would-be users of the fuel. How governments, utilities and the wider public in countries suffering fuel shortages view the experience is likely to shape their future response.

If the prevailing view becomes that fossil fuels are still the bedrock of energy and therefore supplies must be secured over the long term, then the response will be investment in new coal mines and power plants, as well as spending on natural gas exploration, liquefaction, regasification terminals and gas-fired power generators. If the other view gains prominence, investment would switch massively to renewables such as wind and solar, backed up by battery storage, pumped hydro and even gas-fired peaking plants designed to operate only during brief power shortages.

OPEC+ decides to stick with plan for gradual return of production

(Reuters; Oct. 4) - OPEC+ said Oct. 4 it would stick to an existing pact for a gradual increase in oil output, sending crude prices to three-year highs and adding to inflationary pressures that consuming nations fear will derail an economic recovery from the pandemic. The Organization of the Petroleum Exporting Countries, Russia and their

allies, known as OPEC+, have faced calls from big consumers, such as the United States and India, for extra supplies after oil prices surged more than 50% this year.

OPEC+ "reconfirmed the production adjustment plan," the group said in a statement issued after online ministerial talks, referring to a previously agreed deal under which 400,000 barrels per day would be added in November. Brent crude roared above \$81 a barrel on news that the group would stay with its plan for gradual additional production, rather than offering more supply to the market.

An OPEC+ source had told Reuters shortly before the ministerial talks that the group had faced pressure to ramp up production faster, but added: "We are scared of the fourth wave of corona; no one wants to make any big moves." The group agreed in July to boost output by 400,000 barrels per day a month until at least April 2022 to phase out 5.8 million barrels per day of existing production cuts — already much reduced from the cutbacks of almost 10 million barrels a day imposed early in the pandemic.

OPEC+ hesitant to boost output too much and risk lower prices

(Reuters; Oct. 6) - OPEC+'s decision on Oct. 4 to stick with its plan to raise oil output modestly and gradually, despite prices surging to multi-year highs, was partly driven by concern that demand and prices could weaken, sources close to the group told Reuters. The other big reason is money. After seeing their income slide during the pandemic-induced demand and price collapse in 2020, the OPEC+ alliance led by Russia and top exporter Saudi Arabia are enjoying the boost in revenues, three OPEC+ sources said.

OPEC+ negotiated record production cuts of about 10 million barrels per day in April 2020, or about 10% of global output, after restrictions around the world to curb the spread of the coronavirus paralyzed oil demand and hit prices hard. "Everyone is happy," an OPEC+ delegate said of the currently high oil prices, declining to be identified by name. OPEC+ has faced calls this year from large consumers, such as the U.S. and India, for extra supply to help ease the market stress and reduce prices.

"Based on past lessons, OPEC is more cautious because any hasty decision can lead to a sharp drop in oil prices," said an OPEC+ source, explaining the reasons not to increase output further. "The political pressure of the United States and others has not yet been effective in changing this strategy." OPEC+ is mindful, sources said, of the prospect that prices can reverse gains just as quickly. This happened in 2018 when Brent crude fell from above \$85 in October to below \$50 by the end of the year.

Shell sees oil and gas as 'cash engines' to fund energy transition

(S&P Global Platts; Oct. 6) - Shell plans to keep investing in oil, gas and liquefied natural gas as the "cash engines" for the energy transition and expects its giant LNG Canada project, targeted at Asian markets, will operate well into the second half of the century, CEO Ben van Beurden said Oct. 6. Speaking at the online Energy Intelligence Forum, Van Beurden dismissed notions of winding down the upstream oil and gas business as "silly" and said there was "nothing illegitimate" about producing oil and gas.

In the global energy system, "to just believe that you can switch 100% from coal to 100% renewables ... is a little bit of a silly notion," he said. Van Beurden reiterated that Shell would diversify away from oil and gas into providing power, biofuels, hydrogen and mitigation projects such as carbon capture and storage, and will focus on serving consumers as much as the original production process.

But the alternatives to oil and gas remain relatively small as a proportion of company spending and their development will have to be underpinned by earnings from fossil fuels, which would remain "incredibly relevant," Van Beurden said. As an example, the LNG Canada project, in which Shell is the largest partner with first cargoes due mid-2020s, will be operating into the 2050s and beyond, he said. The \$30 billion liquefaction plant, marine terminal and pipeline is under construction in British Columbia.

Putin looks to preserve savings in anticipation of oil and gas decline

(The Wall Street Journal; Oct. 1) - Russia is looking to limit spending from its sovereign-wealth fund as the global transition away from fossil fuels threatens the backbone of its economy. President Vladimir Putin has ordered the government to look into raising the threshold for tapping into the \$190 billion National Wealth Fund, which holds part of the country's oil and gas proceeds. Authorities are now able to spend money from the fund once the liquid part of its assets reaches 7% of gross domestic product. Putin wants to raise that level to 10% of GDP, a move that would curtail spending from the fund.

Putin's order comes after the country's finance ministry said global efforts to reduce emissions and transition away from fossil fuels could hit Russia's budget starting in the early 2030s. Oil and gas sales contribute as much as one-fifth of the nation's GDP, while fuel and energy products make up the majority of Russia's exports.

"Since the international financial economic environment of Russia is very, very unpredictable and fraught with crisis risks, the role of the [fund], of course, is very big and difficult to overestimate," Kremlin spokesman Dmitry Peskov told reporters Oct. 1. However, further limits on spending from the fund could affect Putin's plans to overhaul the nation's creaking infrastructure and boost economic growth. Earlier this year, the government said it could invest as much as 400 billion rubles, equivalent to \$5.5 billion, a year from the National Wealth Fund into infrastructure and development projects.

World's biggest oil traders forecast \$75, \$85 or \$90 oil next year

(Reuters; Oct. 4) - Three of the world's biggest oil traders were at odds about where the oil price will be this time next year, with Vitol taking a bearish view while Gunvor and Trafigura stayed bullish. Benchmark Brent crude surged above to \$81 a barrel on Oct. 4, hitting a three-year high and up more than 50% so far in 2021. Vitol CEO Russell Hardy told the Energy Intelligence Forum he expected the price to ease to about \$75 a barrel by this time next year, citing inflation concerns. Gunvor CEO Torbjorn Tornqvist told the conference: "I would have to say oil will be around \$85." Trafigura offered the highest forecast at \$90.

U.K. wants fossil fuels out of power generation by 2035

(Bloomberg; Oct. 4) - The U.K. will produce electricity only from renewable and nuclear sources by 2035 under plans set out by Prime Minister Boris Johnson's government. As the country grapples with a crisis that has driven natural gas and power prices to record highs and forced the collapse of a number of suppliers, Business Secretary Kwasi Kwarteng announced plans to further cut Britain's reliance on fossil fuels. He told a ruling party conference that nuclear has to be part of the solution in the U.K. energy mix.

Fossil fuel power generation in the U.K. has fallen to unprecedented low levels, as coal stations are shut down and investment in wind and solar power increases. More than half of the electricity now comes from low-carbon sources. But the country remains heavily reliant on gas, and Kwarteng wants that share to reduce. "What we're saying is that by 2035 we won't have any fossil fuels," he said, referring to power production. "We'll have removed gas hopefully, as well as coal."

A bigger share of renewables and nuclear energy will also make the country less dependent on imports, Johnson said at the party conference in Manchester on Oct. 4. "The advantage of that is that it will mean that, for the first time, the U.K. is not dependent on hydrocarbons coming from overseas with all the vagaries in hydrocarbon prices and the risk that poses for people's pockets and for the consumer," he said.

IEA sees global oil demand returning to pre-COVID level late 2022

(S&P Global Platts; Oct. 6) - Global oil demand is set to recover to its pre-pandemic level toward the end of 2022, supported by demand growth in Asia, and increase for "several more years to come" without additional major government policy changes, the head of the International Energy Agency told S&P Global Platts. "Global oil demand is expected to return to pre-COVID levels toward the tail end of 2022, but the recovery will be uneven. Asia is clearly the driver of growth," IEA Executive Director Fatih Birol said in an interview with Platts during the Tokyo "Beyond Zero" Week hosted by Japan.

The coronavirus pandemic-led crisis has been a catalyst in many ways for the energy transition, with many countries and energy companies committing to more ambitious climate goals, including mid-century targets for net zero emissions, Birol said.

"However, our analysis shows that although the COVID-19 crisis caused a historic decline in global oil demand, it's not necessarily a lasting one."

"If we don't see additional major policy changes from governments and more rapid changes in behavior, then global oil demand is set to increase for several more years," Birol said. Amid moves away from fossil fuels to clean energy, "oil and gas markets may experience heightened market volatility and concentration," he said. In any scenario, "an orderly transition requires investment to sustain supplies at the appropriate level."

Buyers in Asia paying more for substitute fuels for natural gas

(Bloomberg; Oct. 5) - Asian buyers are paying top dollar for a variety of fuels that can be fed into steam boilers or power turbines as they seek alternatives to increasingly pricey natural gas. The electricity crisis is roiling energy markets from Europe to Asia, with fuels that can be used for heating or power generation such as propane, diesel and fuel oil in high demand. Goldman Sachs predicts the crunch will boost oil consumption later this year, while China ordered state-owned firms to secure energy supplies at all costs.

In Asia, prices of propane — typically used for cooking or making plastics — have surged to the highest since at least 2016, while fuel oil recently almost doubled from a year earlier. Refiners are getting a boost from the crisis, with profits from converting oil into diesel at the highest since January 2020, before the pandemic eviscerated demand. The power crunch has been caused by surging prices for electricity feedstocks like coal and liquefied natural gas. The cost of LNG in Asia has jumped to a record, although that hasn't discouraged China from buying in its pursuit of energy security.

Saudi Aramco estimates the gas crisis has already increased oil demand by around 500,000 barrels a day, while Goldman sees consumption climbing even higher. Meanwhile, fuel oil inventories are dwindling. Typically used to power ships or as an emergency backstop for natural gas, fuel oil stockpiles at the storage hub of Singapore have shrunk to the lowest level in two years. Pakistan and Bangladesh have been key buyers in the region, snapping up supplies to replace costlier LNG.

High LNG prices drive sellers to ask buyers for letters of credit

(Reuters; Oct. 4) - Sellers of liquefied natural gas are asking for letters of credit from buyers to guarantee they can pay for deliveries as the global spike in prices takes them beyond their credit limits, industry sources said. Defaults have been rare in LNG, which has typically relied on big players with deep pockets, but over the past two to three

years around 20 to 30 companies have entered the market, at least doubling the number of relatively small players.

These companies were lured by a spike in demand, especially in Asia, spurred by relatively cheap gas prices and a global energy transition that saw countries such as China shift from coal to gas. Now credit limits are being breached because of a global price surge, as demand recovers following the COVID-19 crisis and supplies tighten, seven industry sources told Reuters.

In Asia, the focus of LNG trade, spot prices hit a record of \$34.47 per million Btu last week, up roughly 100% from a month ago and more than 500% from the same period last year. A typical cargo is worth between \$100 million and \$120 million compared with less than \$20 million in late February. As a result, sellers are seeking letters of credit when they sell cargoes to trading firms, and even to some end-users, to ensure the buyers' banks have backed the purchases. Banks issue letters of credit on behalf of buyers as a guarantee they will pay the seller within a certain period.

Smaller gas distributors in China cannot afford pricey LNG

(Bloomberg; Oct. 5) - China is urging its liquefied natural gas importers to procure more supply to fix its energy crisis, while providing little financial support for firms paying record-high rates for the fuel. The government isn't providing enough subsidies for recent purchases, making it difficult for smaller gas distributors to secure enough fuel before winter, according to traders with knowledge of the matter. While some firms are avoiding buying for now, they may ultimately have to bow to Beijing's wishes.

North Asian LNG spot prices surged to a record high this week as importers from China to the U.K. intensify competition for a shrinking pool of available winter supply. The world is grappling with an energy crisis as the post-pandemic recovery collides with supply restraints, sending fuel and power prices rallying to eye-watering heights. Many of China's gas distributors are state-owned, and are used to taking losses buying pricey LNG and selling to domestic consumers at fixed rates.

The largest companies are still willing to pay high spot prices to attract shipments away from rivals in Asia and Europe. But with a single LNG spot cargo currently costing more than \$130 million, compared to about \$17 million this time last year, the extreme losses are making buyers blanch. Also, some LNG importers have struggled to secure additional loans from banks to make purchases, traders said. At least two second-tier companies have decided against purchasing shipments because of the high prices.

India lacks adequate, affordable coal, faces power shortage

(Bloomberg; Oct. 4) - The worsening squeeze on India's coal supply is triggering a power crisis that's threatening to stall the world's fastest-expanding major economy. Coal-fired power stations had an average of four days' worth of stock of the fuel at the end of last month, the lowest level in years, down from 13 days at the start of August. More than half the plants are on alert for outages.

With coal used to produce almost 70% of electricity, spot power rates have surged, while coal supplies are being diverted away from key customers including aluminum smelters and steel mills. Like China, India is contending with two key challenges: soaring electricity demand as industrial activity rebounds after pandemic curbs were lifted, and a slump in domestic coal output. The country meets around three-quarters of its coal demand locally, but heavy rains have flooded mines and key transport routes.

Operators of coal-fired plants are facing a dilemma: Pay large premiums at domestic auctions to secure available coal, or wade into a seaborne coal market where prices have soared to the highest on record. Already, the government is drawing up guidelines in case it needs to bring idle power stations back into action. The hit to consumer prices will show up later, when utilities get regulatory approvals to pass on the cost, said Pranav Master, director for infrastructure advisory at credit ratings firm Crisil.

Energy demand pulls in coal by land, sea and rail

(Bloomberg; Oct. 4) - The global energy crisis is reshaping trade routes for coal, illustrating the heightened demand for a fuel many considered on the downswing. China's eastern province of Zhejiang recently received its first seaborne cargo of Kazakhstan coal, as well as a rare rail shipment from Xinjiang. Meanwhile, European power plants are interested in buying Indonesian coal for the first time in two years, according to Chinese industry publication Fengkuang Coal Logistics.

The moves show just how desperate nations are to secure as much of the fuel as they can with energy crises looming on multiple continents ahead of winter. Coal prices are at record levels in Asia, by far the largest market. Few cargoes have taken as much of a roundabout journey as one that traveled from Kazakhstan by land to Russia's Zhelezny Rog Port, where it was loaded onto a bulk carrier at the end of August. The ship spent 30 days sailing 8,501 nautical miles before offloading the 136,000 tons of high-quality coal on Oct. 4, according to a statement from the state-owned Zhejiang Energy Group.

Putin says Europe made a mistake in relying on spot gas market

(Reuters; Oct. 6) - Russian President Vladimir Putin said on Oct. 6 that Europe had made a mistake by reducing the share of long-term deals in natural gas trade and moving to the spot market instead, where prices have surged to record highs. Gas prices have spiked in response to a recovery in demand, as well low levels of storage. "The practice of our European partners has confirmed it once more that they made mistakes," Putin said at a televised government meeting.

"We talked to the European Commission's previous lineup, and all its activity was aimed at phasing out of so-called long-term contracts. It was aimed at transition to spot gas trade," Putin said. "And as it turned out, it has become obvious today, that this practice is a mistake." Russian gas giant Gazprom has long resisted moving to spot trade in Europe, preferring long-term deals which sometimes last around 25 years.

Sellers and buyers share costs of carbon-neutral LNG cargoes

(Natural Gas Intelligence; Sept. 30) - Suppliers of liquefied natural gas are under increasing pressure to lower the carbon footprints of their cargoes. But the question of who pays for the costs of decarbonization is a tricky one, Poten & Partners analysts said Sept. 29. With more LNG supply expected to come online by the middle of the decade, sellers are already finding it difficult to compete on prices, Poten managing editor Sophie Tan said during a webinar.

"Any increase in costs in terms of decarbonization solutions, they wouldn't be able to put it into the LNG price at the moment until the demand is there, or the (anticipated) oversupply somehow gets resolved," Tan said. Still, she said buyers expect to see those costs reflected in the price of LNG in the future. The sector has seen a fair amount of growth this year in carbon-neutral cargoes, where the emissions of LNG shipments are offset through the use of credits.

Sellers and buyers usually split the costs of offsets, with sellers paying for emissions from upstream, liquefaction and shipment, and buyers paying for emissions from combustion. Some sellers have also borne the cost of combustion, which makes up about 76% of a cargo's emissions' profile. Those offset costs can add up for suppliers, tacking on 20 to 30 more cents per million Btu on an already-agreed long-term sale and purchase agreements, said Poten's global head of Business Intelligence Jason Feer.

Qatar places first order for LNG carriers from Chinese shipyard

(Bloomberg; Oct. 3) - Qatar has ordered four new liquefied natural gas carriers worth more than 2.8 billion rials (\$762 million) from a Chinese shipbuilder, as demand for the

fuel booms. State energy firm Qatar Petroleum said Oct. 3 the vessels will be built by Hudong-Zhonghua Shipbuilding, a subsidiary of China State Shipbuilding. It's the first time QP has ordered LNG carriers from China.

The ships are the first batch of bookings for the company's North Field expansion project, which will see Qatar spend almost \$30 billion to increase its production capacity by more than 50%. Demand for LNG — of which Qatar is the world's biggest exporter — is projected to rise strongly in the coming decades as countries cut their use of dirtier fossil fuels such as coal and oil.

Exxon says it's in 'strong position' to participate in Qatari LNG project

(Reuters; Oct. 4) - ExxonMobil is in a "strong position" to negotiate with Qatar to participate in the country's North Field Expansion development plan, the world's largest liquefied natural gas project, vice president Neil A. Chapman said Oct. 4. State-controlled producer Qatar Petroleum is expected to announce its partners for the nearly \$30 billion project next year. The expansion will boost Qatar's output capacity 40%, to 110 million tonnes a year in its first phase.

Exxon is hopeful it will succeed in its bid to participate in the expansion with its long-term partner QP, Chapman said at an online conference. But the U.S. producer could also accelerate investments in Guyana, in the Permian and other projects elsewhere that are competitive in terms of cost of supply, he said. "We have options around the world that are all very, very competitive," Chapman said at a panel organized by the Energy Intelligence Forum. "We are very fortunate to be in that position, quite frankly."

QP made its investment decision alone and is trying to negotiate better contract terms as it has become less financially dependent on oil majors. The company is seeking to partner with oil majors to share the financial risk of the LNG expansion. ExxonMobil is part of Qatar's existing LNG production operation, together with Shell, TotalEnergies and ConocoPhillips. Chevron and Italian producer Eni have also submitted bids.

Investigators say ship's anchor may have ruptured oil line

(The Associated Press; Oct. 5) - Evidence emerged Oct. 5 that a ship's anchor dragged an underwater pipeline that ruptured, spilling tens of thousands of gallons of crude off Southern California, an accident the Coast Guard acknowledged it did not investigate for nearly 10 hours after the first call came in about a possible leak. The pipe was split open and a mile-long section apparently pulled along the ocean floor, possibly by "an anchor that hooked the pipeline, causing a partial tear," federal investigators said.

"The pipeline has essentially been pulled like a bow string," said Martyn Willsher, CEO of pipeline operator Amplify Energy. "At its widest point, it is 105 feet away from where it was." Huge cargo ships cross above the pipeline as they head into the Los Angeles-Long Beach port. They are given coordinates where they are to anchor until unloading.

Even when anchored, ships continually move from shifting winds and tides. If an anchor isn't properly set, those forces kick in and can push the ship and drag the anchor along the bottom, potentially catching anything in its way, said Steven Browne, a professor of marine transportation at California State University Maritime Academy. Anchors on large ships can weigh 10 tons or more and are attached to hundreds of feet of thick chains. "Whatever the anchor gets fouled on will come along with the ship," he said.

The spill sent up to 126,000 gallons of heavy crude into the ocean off Huntington Beach. It then washed onto miles of beaches and a protected marshland. The beaches could remain closed for weeks or longer, a major hit to the local economy. Coastal fisheries in the area are closed to commercial and recreational fishing.

Canada invokes 1977 treaty to save oil line into Michigan

(Natural Gas Intelligence; Oct. 5) - The environmental fight over Enbridge's Line 5 oil pipeline across Michigan and the Great Lakes escalated Oct. 4 into the first-ever use of a 44-year-old energy traffic treaty between Canada and the United States. Canadian Foreign Affairs Minister Marc Garneau announced that a formal request has been made to save the line with a dispute resolution and arbitration process under the 1977 Transit Pipelines Agreement between the two countries.

The treaty "prohibits measures that are intended to impede, divert, redirect or interfere with crude oils or natural gas liquids moving through transit pipelines, such as Line 5, or that would have that effect," said Garneau. "Today Canada is formally invoking the dispute settlement provision of the 1977 Agreement to ensure its full application." "Canada supports Enbridge's plan to replace the existing (68-year-old) pipeline with the proposed Great Lakes tunnel project."

Michigan Gov. Gretchen Whitmer had ordered construction for the four-mile underwater crossing to be shut down in mid-May after revoking the state property easement between Lake Michigan and Lake Huron. However, Enbridge has prevailed in court battles. Enbridge has attempted to enforce an agreement made with a previous governor to replace the old line with new pipe in a \$500 million tunnel. Whitmer won a 2018 election on a platform that demanded removal of the pipe.

Philadelphia refinery being dismantled to reclaim site for new tenants

(Bloomberg; Sept. 30) - After part of the Philadelphia Energy Solutions refinery exploded into flames one night in 2019, its owners filed for bankruptcy and put the 1,300-acre site up for sale. Hilco Global, a company with a track record of transforming fossil-fuel infrastructure like coal power plants, bought the South Philadelphia facility out of bankruptcy with a grand new vision that includes logistics facilities and research labs.

Oil refining has taken place on the banks of the Schuylkill River since just after the Civil War. The company now has a daunting task of safely dismantling more than 100 buildings, 3,000 tanks and 950 miles of dirty pipelines. By the time the explosion scattered debris across the site and even over the river, the PES Oil Refinery was turning 330,000 barrels of crude day into gasoline, diesel, heating oil and jet fuel.

Hilco is in the second year of dismantling equipment and preparing the site for construction. The first tenants are expected in 2023. Hilco paid about \$225 million and will make a "multibillion-dollar" investment to take down the refinery and ready the area for building. That includes recycling or disposing of everything from asbestos to contaminated soil and raising the elevation above the 100-year floodplain so it's more resilient to rising sea levels. There are about U.S. 130 refineries and most are pretty old; the newest one that can handle over 100,000 barrels a day was built in 1977.

Documentary looks at orphaned oil and gas wells in Canada

(CBC News; Canada; Oct. 2) - A new documentary asks the question — which may be an uncomfortable one for some Albertans — what happens when a symbol of wealth becomes a sign of decay? Gillian McKercher was an engineer with ConocoPhillips until she was laid off in 2016. She took that opportunity to pivot toward one of her passions: storytelling. "As a daughter of oil and gas, I always find myself coming back to the energy industry," McKercher explains in her new documentary, "Orphaned."

"I am fascinated by it and I want to make amends." And she's not alone. Oil and gas runs through the family blood, including her father, Brent McKercher, a geologist since the late 1980s. "In Canada alone, there are at least 475,000 conventional oil and gas sites that need to be cleaned up, at an estimated cost of C\$40 billion to C\$76 billion," McKercher said. "This is a non-partisan issue. Many companies can't afford to take care of their liabilities; they will go bankrupt. So where is the money and the labor going to come from? How can the public keep the oil industry accountable to clean up?"

Alberta is at the heart of the problem because it produces about 80% of the oil in Canada. Between 2014 and 2020, 4,432 orphan wells were cleaned up. In 2021, there's more than 2,600 that require attention, but many more sites will be considered orphaned once bankruptcy proceedings work their way through the legal system. The

Alberta Energy Regulator is the parent of the Orphan Well Association, which is funded by industry levies and loans from the provincial and federal governments.