

Oil and Gas News Briefs

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OPEC+ calls off meeting as UAE demands higher production quota

(Bloomberg; July 5) - The OPEC+ oil cartel is facing its biggest crisis since a price war at the start of the coronavirus pandemic. The United Arab Emirates, the group's fourth-biggest producer, is arguing against a deal proposed by Saudi Arabia and Russia to extend quota limits to 2022. The UAE has agreed with the other 22 OPEC+ members that monthly output cuts should be eased starting in August, but it also wants to see a boost in its own baseline production volume. That is not going over well with others.

The group normally settles its differences in private and likes to put on a show of unity. But this rift runs so deep that the energy ministers of the UAE and Saudi Arabia aired their grievances in interviews with the news media on July 4. The Organization of the Petroleum Exporting Countries and its allies had planned to meet on July 5 to try to bridge the divide, but called off the meeting. Without a deal markets will be left in limbo at a time when they're clamoring for more oil, prices for which are up 50% this year.

The UAE claims it can pump much more than its baseline of 3.2 million barrels a day under OPEC+'s quota system. Energy Minister Suhail Al-Mazrouei said that level is "totally unfair and unsustainable." The country wants an increase to 3.8 million barrels if the supply agreement — signed in April 2020 as the pandemic was crushing oil demand — is extended until the end of 2022. Mazrouei said the UAE has one-third of its output idle, and is "sacrificing" its production to a greater extent than other OPEC+ members. Abu Dhabi, which produces almost all the UAE's crude, is spending around \$25 billion a year to help boost its capacity to 5 million barrels a day by the end of the decade.

Price war possible, but not expected, analysts say

(Bloomberg; July 6) - The breakdown of OPEC+ talks on production levels has left the oil market in limbo. The immediate consequence is that an expected increase in output in August now likely won't happen, leaving the world short of barrels as the economic recovery gathers pace. The lack of unity within the alliance has also raised the specter of a repeat of the 2020 price war when members pumped at will and sent prices falling. The situation is still very fluid and it is possible talks could be revived in the coming days.

Opinions vary among analysts. With no more OPEC+ supply imminent, the oil market is likely to tighten further and that could result in \$80-a-barrel Brent by September, UBS analyst Giovanni Staunovo said in a note. The alliance could still reach an agreement,

given negotiations will likely continue among member states, he added. Warren Patterson, head of commodities strategy at INS in Singapore, said members will probably start pumping more. There is potential for a price war like last year, but all involved will try to avoid that, Patterson said.

Brent is expected to breach \$80 sooner than expected following the breakdown of the OPEC+ talks, analysts at Citi including Ed Morse and Francesco Martoccia said in a note. Prices above this level would severely hamper the economic recovery now under way, particularly in emerging markets, they said. If there is no increase in production, then oil at \$85 to \$90 a barrel is on the cards, Fereidun Fesharaki, chairman of industry consultant FGE, said. However, it's likely some sort of compromise will be reached over the next one to three weeks, although prices are likely to rise until this happens, he said.

U.S. shale producers hedge to lock in higher prices

(Bloomberg; July 6) - As soon as OPEC+ negotiations fell apart on July 5, stoking fears of a supply squeeze and sending oil prices soaring, U.S. shale executives began hitting the phones. They weren't ordering their crews to drill for more oil. They weren't game-planning a miraculous comeback in American crude production. They were securing hedges — locking in prices for the oil they plan to produce next year and protecting themselves against a potential market slump, people familiar with the trades said.

The hedges are just about the only thing that's certain about shale's response to the OPEC+ crisis thus far. The cartel's failure to reach a deal in several meetings since last week has raised the question of whether America's oil drillers will stage a comeback and take advantage of the moment to steal market share. Some, on the other hand, fear the cartel's rift could trigger a price war that would flood the market with crude.

It represents the biggest test yet of shale's newfound resolve to act with discipline and focus on investor returns as opposed to obsessing over growth. Whether the industry will manage to stay its course or put hundreds of sidelined drill rigs back to work is up for debate. Shirin Lakhani, an oil analyst at Rapidan Energy, said publicly traded shale producers are "still more focused on capital discipline, increasing shareholder returns, and maintaining positive free cash flow." However, energy analyst Paul Sankey described the industry as "spending alcoholics standing in a fully stocked bar right now."

More international oil companies want to quit Iraq projects

(S&P Global Platts; July 4) - BP and Lukoil want to quit their Iraqi energy projects due to the current investment environment, the country's oil minister said, as OPEC's second-biggest producer faces an exodus of international oil companies that want to exit

unattractive contracts. Lukoil wants to sell its stake in the West Qurna 2 field to Chinese companies, Oil Minister Ihsan Ismaael said in a video posted online.

"The investment environment in Iraq is not appropriate to maintain major investors," Ismaael said in the video to some members of parliament. "All major investors either are looking for another market or looking for another partner." Officials from BP, Lukoil and the Iraqi oil ministry were not available for comment. BP and Lukoil would join ExxonMobil, which is seeking to sell its stake in the southern oil field of West Qurna 1.

BP is lead contractor of the Rumaila oil field, where it has a 38% stake alongside China National Petroleum Corp.'s 37%. The venture's technical-services contract expires in 2034. The southern field of Rumaila is the country's biggest, with a production capacity of about 1.5 million barrels per day out of Iraq's 5-million-barrel capacity. The field has an estimated 17 billion barrels of recoverable oil remaining. Lukoil has a 75% stake in the southern mega field West Qurna 2 with state-owned North Oil Co. holding the rest.

Iraq is considering buying Exxon's 32.7% stake in West Qurna 1, Ismaael said May 3. The field has expected recoverable reserves of over 20 billion barrels. International oil companies operate some of Iraq's biggest fields in return for a per-barrel fee linked to production. The terms of the contracts have been a point of contention over the years.

[Iran's oil minister says country could boost output quickly, if allowed](#)

(Bloomberg; July 4) - Iran's Oil Minister Bijan Namdar Zanganeh said his country has taken "many measures" to ensure it can raise crude production in "a very short time" if U.S. sanctions are lifted, the state-run Shana news agency reported. World powers have worked for months trying to broker an agreement between Iran and the U.S. that would restore Washington's membership of the 2015 nuclear accord abandoned by former President Donald Trump in 2018.

A revived deal would ease sanctions, triggering the return of Iranian oil to the market. Despite the "extraordinary challenges" faced by the Iranian economy, the country can "easily" increase production to 6 million barrels a day, Zanganeh said, without detailing the preparations it has made or giving a precise time-frame. Iran's daily production hasn't been at 6 million since the 1970s and is currently about 2.5 million barrels.

Iran is exempt from OPEC+ production quotas while it remains under sanctions, but the prospect of an influx of Iranian supply into markets once the penalties are removed could weigh on prices if the cartel continues to ease supply curbs. Zanganeh said "nothing will happen" to global markets if Iranian exports spike after sanctions are lifted, because "OPEC is wise enough, and the OPEC+ that's cooperating with OPEC are also wise people who will certainly understand and digest Iran's return very well."

Mexico picks state company over U.S. firm to operate new field

(Reuters; July 5) - Mexico has tapped state-owned Pemex to run a major shared oil find over the private consortium led by a U.S. company that first discovered it, in the latest win for President Andres Manuel Lopez Obrador's nationalistic energy policies. The disputed offshore deposit, believed to hold some 700 million barrels oil, is thought to straddle two neighboring blocks in the southern Gulf of Mexico, one belonging to Pemex and the other to a private consortium of companies led by Houston-based Talos Energy.

The government awarded Pemex the rights to operate the potentially lucrative offshore Zama discovery in an energy ministry letter dated July 2. It decided in favor of Pemex even though a Talos-led consortium won the rights to drill in a competitive 2015 auction, announced the discovery of the well that gave name to the deposit two years later, and has argued that it should run the project. The field, located in water 550 feet deep, is significantly deeper than most of Pemex's shallow-water projects in the southern Gulf.

It was the first major oil discovery by foreign companies after reforms spearheaded by Mexico's previous administration opened up the country's energy sector to foreign and private producers, which Lopez Obrador has taken steps to roll back. Talos said in a statement it was "very disappointed" by the ministry's decision, adding that it would explore all legal and strategic options to maximize value for its shareholders from Zama. Talos and its partners have invested more than \$250 million in the project, drilling four exploratory wells so far, while Pemex has yet to drill on its side of the shared deposit.

Companies ordered to help pay cleanup costs of their former wells

(The Wall Street Journal; July 6) - Some of the world's largest oil companies have been ordered to pay part of a \$7.2 billion tab to retire hundreds of aging wells in the Gulf of Mexico that they used to own, capping a case that legal experts say is a harbinger of future battles over cleanup costs. A federal judge ruled last month that Fieldwood Energy, a privately held company that currently controls the old wells and had sought bankruptcy protection, could pass on hundreds of millions of dollars in environmental liabilities to prior owners and insurers of the wells as part of its reorganization plan.

ExxonMobil, BP, Hess Corp., Shell, and insurance companies had objected to the plan. The dispute, litigated for months in federal bankruptcy court, centered over who should bear the enormous costs of capping and abandoning wells, mostly in the shallow waters of the Gulf of Mexico where an oil spill could wreak havoc. The companies can appeal the ruling. The future costs of the cleanup are unclear, but lawyers for BP estimated its liability could top \$300 million. Lawyers for Exxon said its exposure could total as much as \$373 million. A group of insurers said they could be on the hook for over \$1 billion.

For offshore wells — unlike most onshore wells — the Department of the Interior can hold previous operators liable for the cleanup if the current operator is unable to cover

the expenses, to avoid taxpayers incurring the costs. Such fights are likely to become more common in the years ahead as countries aim to reduce carbon emissions to comply with the Paris Climate Agreement, said Jason Bordoff, founding director of Columbia University's Center for Global Energy Policy.

Oil and gas industry counts \$140 billion in assets up for sale

(The Financial Times; London; July 5) - One company's transition away from fossil fuels is another's opportunity to double down. Under intense pressure from investors and activists to take more action on climate change, some of the world's biggest oil and gas companies are putting billions of dollars' worth of assets up for sale. Watching from a distance are people like Brian Gilvary, the head of Ineos Energy, an arm of the private U.K. chemicals company. As many energy companies try to shift from oil to gas and lower-carbon technologies, Ineos is buying up unwanted fossil fuel assets.

"We have an appetite to acquire," said Gilvary, the former chief financial officer at U.K. energy major BP who joined Ineos in December. In March the company announced it would acquire Hess Corp.'s oil and gas assets in Denmark for \$150 million. The Danish government has said that it intends to halt oil production by 2050, but Gilvary is undeterred. "This deal was attractive to us. We know the fiscal regime under which we will be operating, he said. "We know what the endgame looks like.

Energy analysts at Wood Mackenzie said ExxonMobil, Chevron, BP, TotalEnergies, Eni, and Shell have sold \$28.1 billion in assets since 2018 alone. Now they are targeting in the coming years further disposals of more than \$30 billion. The total value of oil and gas assets up for sale across the industry stands at more than \$140 billion, the analysts said. The disposals come amid rising speculation about "stranded assets" — oil and gas reserves that might never be extracted if the world pursues the Paris climate goals.

Alberta now owns half of a money-losing refinery

(Calgary Herald columnist; July 6) - Albertans should have expected we'd end up in this boat. The province's long-standing financial commitment to the Sturgeon Refinery has turned into an ownership stake — we now own half of a refinery. Add it to the unfinished cross-border pipeline the province has a stake in, or the money-losing, unwanted oil-by-rail contracts Alberta owns. Perhaps we could hold a two-for-one sale on mega-projects.

The government announced July 5 it has acquired a 50% stake in the over-budget and behind-schedule refinery. A Crown corporation now holds the stake previously owned by a private operator. The province said there will be no additional cost to taxpayers,

beyond what it would otherwise be required to pay through processing tolls to the refinery, while North West Refining will receive a \$425 million payment in the deal.

The bottom line is the C\$10 billion project is now co-owned by taxpayers, along with existing co-owner Canadian Natural Resources. “We inherited a pretty bad deal from previous governments ... and determined there was no way out,” Energy Minister Sonya Savage said. “The only way to improve the situation was to actually jump in further, take an equity position and be able to renegotiate all the debt, limit and mitigate the risk, and ensure taxpayers were able to share in the upside as well as just the risks.”

The project, the first new refinery built in Alberta in more than 30 years, was backed by former governments even as the capital costs — and financial commitments for the province to use the facility — spiraled higher. In 2014, the project was expected to cost \$5.7 billion to build, but it came in at \$10 billion. Part of the issue that has faced Alberta governments over the years is being enticed to get involved with big-ticket energy projects with the false hopes of creating jobs and generating economic development.

Petronas lands 10-year deal to supply China with Canadian LNG

(Natural Gas Intelligence; July 8) - Malaysia’s state-owned Petronas, has struck a \$7 billion liquefied natural gas supply deal with China National Offshore Oil Corp. (CNOOC) that will include cargoes from the LNG Canada project under construction in Kitimat, British Columbia. Under the terms of the deal, Petronas would supply 2.2 million tonnes per year of LNG to CNOOC for 10 years. The supplies are to be indexed to a combination of Brent crude oil prices and the Alberta natural gas benchmark price.

Petronas Vice President of LNG Marketing and Trading Shamsairi M. Ibrahim said the deal “reflects the markets’ receptiveness and recognition of AECO-indexed LNG into the world’s largest LNG market.” The announcement comes as long-term LNG supply deals are seen rebounding for their stability, as spot prices have been on the rise.

Petronas, a partner on the Shell-led LNG Canada project, announced earlier this year it had made its first spot LNG sale indexed to AECO. Petronas has also recently beefed up its holdings in the Montney Shale to source gas supply for its stake in the LNG Canada project, which is expected to enter service by the middle of the decade.

Taiwan signs 15-year deal to buy LNG from Qatar

(Taipei Times; Taiwan; July 8) - Taiwan has signed a 15-year agreement with Qatar to purchase 1.25 million tonnes of liquefied natural gas per year, the Ministry of Economic Affairs said in a statement July 7. The sales and purchase agreement, which state-run CPC Corp. signed with Qatar Petroleum, would add to the stability of the nation’s LNG supply in line with the government’s energy-transition policy, the ministry said.

“As Taiwan moves away from coal and nuclear, and toward renewable energy and LNG, we are in need of more long-term assured supplies,” CPC spokesman Chang Ray-chung said. Taiwan in 2007 signed a 25-year agreement to purchase 3 million tonnes of LNG from Qatar, Chang said. The nation also has similar long-term with Australian and U.S. suppliers, although Qatar is the country’s biggest supplier of LNG, he said. Chang estimated that Taiwan used about 17 million tonnes of LNG last year.

“About 65% to 70% of that is satisfied by our long-term agreements, while a further 20% or so is secured by shorter-term agreements,” Chang said. Taiwan’s two LNG receiving terminals can only hold less than two weeks of gas supply and both are operating at more than 100% capacity, he said. “Expansion plans are underway to add more storage tanks, more receiving docks and more pipelines at the two existing terminals while we build more terminals,” Chang said.

Russian producer makes plans for two more Arctic LNG projects

(Natural Gas World; July 5) - Novatek envisages taking a final investment decision on its third major gas liquefaction project in the Russian Arctic in 2023 or 2024 at the latest, Chief Financial Officer Mark Gyetvay said in a podcast July 2. The officer at Russia's largest independent gas producer was referring to Arctic LNG-1, which will exploit gas at the Soletsko-Khanavaiskoye, Geofizicheskoye and Trekhbugornoye fields on the Gydan Peninsula to produce an expected 19.8 million tonnes of LNG per year.

Arctic LNG-1 has already attracted “strong partnership interest” but more exploration is needed before Novatek can begin the farm-out process, Gyetvay said. Partners will be necessary to share risks and costs, as was the case at Novatek’s Yamal LNG and Arctic LNG-2 facilities, he said. The company will look to retain at least a 60% interest. Development would likely start in 2026 or 2027, right after Novatek finishes construction of its similarly sized Arctic LNG-2 plant, Gyetvay said.

Construction is underway on Arctic LNG-2, with its first liquefaction unit scheduled to come online in 2023, followed by two more units. Novatek’s first terminal in the Arctic, Yamal LNG, started operations in 2017. Looking ahead, Novatek is considering Arctic LNG-3, also at 19.8 million tonnes annual output capacity, underpinned by resources in the Gulf of Ob that divides the Gydan and Yamal peninsulas. The company’s Arctic LNG-3 development will likely get underway in the 2030s, Gyetvay said.

Chevron leads \$4 billion gas recovery project in Australia

(Reuters; July 1) - Chevron and its partners in the Gorgon LNG project off Western Australia have agreed to go ahead with a \$4 billion project to improve gas recovery from offshore wells and keep the huge liquefied natural gas plant filled for 40 years. The

Jansz-Io Compression project, which will help gas recovery to feed the Gorgon project as the Jansz-Io field ages, is expected to take five years to complete, Chevron said.

The decision comes as Australia's LNG exporters tout their role in helping Asian customers switch from using dirtier coal in power generation, while the Australian government faces international pressure to do more to curb carbon emissions. The project involves building a 27,000-tonne floating field control station, a subsea compression infrastructure and an 84-mile underwater power cable to Barrow Island, where the 15.6 million-tonnes-a-year Gorgon liquefaction plant is located.

The Jansz-Io field has been producing gas since 2015. "After approximately 10 years of production, reservoir pressure will decline. The addition of compression will enhance the recoverability of the field, allowing gas supply to the LNG and domestic gas plants on Barrow Island to be maintained long-term," a Chevron spokesperson said in an email.

Japan plans big increase in solar power by 2030

(Bloomberg; July 6) - Japan seeks to add more solar power in a bid to reach its ambitious 2030 emissions-reduction goal, which could eventually lead to every building, parking lot, and farm in the densely populated nation being fitted with rooftop panels. The world's third-biggest economy aims to have 108 gigawatts of solar capacity online by 2030, about 1.7 times higher than the nation's previous target and 20 gigawatts more than the current pace of additions, according to the environment and trade ministries.

The new target comes after Japan said it would reduce its greenhouse-gas emissions 46% by 2030 compared with 2013, strengthening a previous commitment under the Paris Agreement. The country, roughly as big as California but with three times the population, is studying how to lower its dependence on fossil fuels as it grapples with limited available space and a large anti-nuclear contingent. But it has a long way to go to wean itself off coal and natural gas, which generate more than 70% of its electricity.

Land is limited to add large-scale solar projects, and that leaves the nation needing to increase so-called distributed solar generation, which are small-scale panels on top of buildings or farms. According to the environment ministry's report, Japan aims to hit the new 2030 solar goal using several strategies: 50% of central government and municipality buildings will have solar panels, which will add 6 gigawatts; boosting the use of solar on corporate buildings and, parking garages, which will add 10 gigawatts; and adding 4 gigawatts in public land and promotion areas in 1,000 cities and towns.

Rising demand for natural gas conflicts with net-zero emissions goals

(Reuters; July 5) - A rebound in global gas demand to 2024 following a record fall last year is poised to knock the world off-track for a climate goal of achieving net-zero emissions by 2050, the International Energy Agency said on July 5. More than 190 countries have signed the Paris Agreement designed to limit global warming, which will require a huge reduction in the use of fossil fuels such as coal and gas.

“Natural gas demand is set to rebound strongly in 2021 and will keep rising further if governments do not implement strong policies to move the world onto a path toward net-zero emissions by mid-century,” the IEA said in its latest gas outlook. Gas demand in 2021 is expected to rise by 3.6% as global economies recover following a record fall in 2020 due to restrictions to limit the spread of the coronavirus.

Gas demand growth is expected to average 1.7% per year 2022-2024, which would be too high to keep to the IEA’s roadmap toward meeting global net-zero emissions by 2050. The IEA in May published a pathway for the energy sector to meet the net-zero emissions target and said investors should not fund new oil, gas, and coal projects.

Qatar plans to spend \$200 million on cleaner LNG

(S&P Global Platts; June 30) - Qatar Petroleum will spend \$200 million on emissions reduction technology for its North Field LNG expansion project, according to the company's bond prospectus. The prospectus lists "greenhouse gas reduction measures including the installation of a CO2 capture and sequestration system, power import from solar power plants, maximization of waste-heat recovery, improved machines efficiency utilizing latest available technology, and the use of ultra-low NOx burners."

"These design improvements are expected to achieve an estimated 30% reduction in GHG emissions, compared to similar existing LNG facilities," the prospectus said. The first phase of the two-phase North Field expansion project will cost \$28.75 billion — making it one of the largest energy projects globally — and boost Qatar's LNG production to 110 million tonnes per year from 77 million. First gas is expected in early 2025. Under the timeline, the first phase will be fully commissioned by the end of 2026.

Capacity will rise to 126 million tonnes per year by 2027 under the second phase. QP aims to reduce the overall net-carbon intensity of its LNG facilities by 25% and that of its upstream facilities by 15% by 2030.

Qatar invests in Total's South Africa offshore exploration

(S&P Global Platts; July 4) - State-owned Qatar Petroleum said it signed an agreement with France's TotalEnergies to acquire an interest in three South African offshore exploration blocks as the Gulf state seeks to expand its international footprint. Under the terms of the agreement that are subject to approval by the South African government, QP will own 25% to 30% of the three blocks, the company said in a July 4 statement.

QP, the world's biggest LNG producer, has moved in the past few years to expand its overseas footprint and recently stepped up its activity to grow a gas-focused worldwide upstream portfolio. It has boosted its international presence through several overseas upstream and downstream deals in countries including Oman, Mexico, Angola, Kenya, Guyana, Mozambique, the U.S., Brazil, Ivory Coast, Mozambique, Kenya, and Morocco.

The three South African offshore blocks total almost 40,000 square miles, in waters up to 16,000 feet deep. TotalEnergies is the operator for the partnership in all three blocks. Touted as one of the biggest finds globally in 2020, TotalEnergies' "game-changing" deepwater natural gas and condensate discovery at the Brulpadda prospect, in one of the blocks, was announced in February 2019. Estimated to hold about 1 billion barrels of oil equivalent of gas and condensate, Brulpadda is South Africa's first major offshore hydrocarbon discovery, which has sparked new drilling interest in the region.

China starts generating power at newest Yangtze system dam

(Reuters; June 28) - The giant Baihetan hydropower plant on the upstream branch of China's Yangtze River started generating electricity for the first time on June 28, state broadcaster CCTV reported. The project's first two 1-gigawatt turbines will go into formal operation after a three-day trial run, CCTV said. The project will eventually consist of 16 such units, making its total generation capacity second only to the Three Gorges Dam once it is fully completed in July next year.

Baihetan was built by the China Three Gorges Corp. and is located on the border between the southwestern provinces of Yunnan and Sichuan. It is part of a cascade of dams on the Jinsha River, which is the upstream section of the Yangtze. The dam is 948 feet tall and took four years to build.

The project is part of a national plan to generate electricity and deliver it to high energy-consuming regions on the eastern coast. It is also designed to help control water flows during the summer flood season. An ultra-high voltage transmission line connecting Baihetan to the eastern province of Jiangsu is set to go online in 2022. Environmental groups have criticized large-scale damming of the Yangtze and its tributaries because of concerns it has destroyed major habitats and damaged natural flood plains.

Equinor starts new North Sea field where costs doubled

(Reuters; July 1) - Norway's Equinor started production at its oil and gas field Martin Linge in the North Sea near the maritime border with Britain, the company said on July 1. The field holds an estimated recoverable resources of about 260 million barrels of oil equivalent, and is expected to produce around 115,000 barrels of oil equivalent per day when reaches its peak in 2022.

Natural gas from Martin Linge will be exported via pipelines to St. Fergus terminal in Britain, while crude oil will be exported with shuttle tankers, Equinor said. The field's production facilities are supplied with electricity from shore via a 100-mile-long alternating-current cable, helping to reduce greenhouse gas emissions, while its wells and processing equipment are operated from an onshore control room.

The field was originally planned to start in 2016, but its start-up had been postponed several times, including over problems with pre-drilled wells. As a result, the development costs have doubled to 63 billion Norwegian crowns (\$7.29 billion) from an original estimate of 31.5 billion crowns, Equinor said. Equinor operates the field and holds a stake of 70%. Norway's state-owned Petoro holds the rest.

Rural Saskatchewan communities owed millions in oil taxes

(Saskatoon Star Phoenix; Canada; July 4) - Rural municipalities in northwest Saskatchewan are chasing after millions of dollars in unpaid taxes from struggling oil companies. They hope to recover the money as oil prices rebound into the \$70s after cratering during the pandemic — but if they can't, rural ratepayers may be left holding the bag. Brian Graham, the elected leader of Manitou Lake, population about 600, hopes to recoup \$395,866 owed by five oil companies.

His municipality is one of several in Saskatchewan that are out money because oil and gas companies working within their borders declared bankruptcy in recent years. Over the past four years, Manitou Lake has written off \$1.5 million in municipal taxes it couldn't collect from oil and gas companies. Transporting oil in Manitou Lake takes a toll on roads, and oil company taxes are supposed to help pay for maintenance. When the money's not available, it tightens municipal budgeting, said administrator Joanne Loy.

The bankruptcies also result in leases going unpaid, while local suppliers and contractors lose business. Graham wants more tools from the province to help the small municipalities collect taxes owed, but the province said it is not inclined to do so. "If the company's not producing and the wells are just sitting there, we have no real recourse to collect the money. We end up having to write off those taxes," said Larry Lundquist, the elected leader of Eldon, population fewer than 800.