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FEATURED Q&A

Can Mexico Keep Its Oil Reserves from Dwindling?

Low oil prices around the world since 2014 and uncertainty about the future of Mexico's oil sector are to blame for the country's decline in proven crude reserves, R. Kirk Sherr says below. Pictured is a Pemex offshore oil compression platform. // File Photo: Pemex.

Q Mexico's oil reserves are depleting so quickly that the country could completely run out of oil within nine years if it does not make any new discoveries, according to the commissioner of the National Hydrocarbons Commission, or CNH. How likely is it that the projected scenario will occur? What steps has Mexico taken to mitigate this risk, and will they be enough? Why did Mexico's oil sector end up in this situation to begin with, and is there a risk of depleted reserves being a recurring issue for the country?

A George Baker, publisher of Mexico Energy Intelligence: "A country with petroleum deposits never 'runs out of oil' in a literal sense. What it may run out of is oil that can be produced at a profit at existing prices for oil and oilfield services. A second consideration is that the métier of an oil company not only concerns the discovery of oil in commercial deposits and its subsequent production and sale, but also technological advances that allow for the additional barrel to be produced that, otherwise, under today's technology, would have stayed in the ground. Said differently, all oil companies are keenly interested in increasing not only production but also the recovery factor of the reservoir. This last element is not properly understood in Mexico, as evidenced by the existence of fixed time limits in the contracts issued by CNH. A contractor is allowed 35 or 40 years with five-year extensions. However, what will happen at year 30 is that a contractor who could implement a new technology to extend the commercial life of the field by 20 years will not invest in that technology. Why? It would take 10 years to recover the investment completely, and the company would not

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Venezuela's Citgo Donated $500,000 to Trump Inauguration

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Court Halts Sale of Petrobras' Stake in Oilfield to Statoil

The sale was suspended after Brazilian oil workers' union the National Federation of Oil Workers filed a lawsuit against Petrobras, headed by CEO Pedro Parente, saying the company should have an open tender for the interest.

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Parente // File Photo: Brazilian Government.

OIL & GAS SECTOR NEWS

Venezuela's Citgo Donated $500,000 to Trump Inauguration

Citgo, the U.S. unit of Venezuelan state-run oil company Petrobras, gave half a million dollars to U.S. President Donald Trump's inauguration fund, Agence France-Presse reported, citing documents released by the U.S. Federal Election Commission on Wednesday. Citgo is among the 20 companies and individuals who made the largest donations to the committee that organized the inauguration events, according to the FEC's documents. The donation came amid a staggering economic and political crisis in Venezuela, in which many residents are forced to go without necessities such as basic food and medicines, as well as a low point between U.S.-Venezuela relations. Venezuelan President Nicolás Maduro frequently blames the United States for the country's economic woes, and says the United States props up Venezuela's opposition movement and has been behind plots to remove him from power. The White House has called on Maduro's government to release political prisoners, and Trump in February welcomed to the White House the wife of imprisoned opposition leader Leopoldo López. Also on Wednesday, U.S. Secretary of State Rex Tillerson said U.S. officials are "concerned" that the Venezuelan government "is violating its own Constitution and not allowing the opposition to have their voices heard." The same day, three people were killed in massive anti-government protests over the country's economic and political crisis. Anti-government protests have intensified in the weeks following the Venezuelan Supreme Court's effective dissolution of the country's National Assembly, a move the high court later reversed amid widespread condemnation and concerns that the country was becoming a dictatorship. Despite chilly relations between the United States and Venezuela, Citgo's donation to the inauguration is on par with those of Microsoft, JP Morgan, Exxon and Chevron. The United States is Venezuela's main trading partner.

The White House has called on Maduro's government to release political prisoners.

Court Halts Sale of Petrobras' Stake in Oilfield to Statoil

A Brazilian court has ordered that state-run oil company Petrobras suspend its sale of an exploratory oil block to Norway's Statoil, Reuters reported Monday. The deal to sell Petrobras' stake in the BM-S-8 region known as the Campo de Carcara was approved by regulators, and the deal was closed in November. Half of the $2.5 billion in proceeds that Petrobras has received from the sale have been used to pay its debts, the company said. The sale was suspended after Brazilian oil workers' union the National Federation of Oil Workers filed a lawsuit against Petrobras, saying the company should have an open tender for the interest, oilprice.com reported. Petrobras said it will take the necessary legal steps to protect its interests, Reuters reported. Despite the court order, however, Statoil remains upbeat about its portfolio in Brazil, saying the Norwegian company's portfolio in the country is still solid, UPI reported Wednesday. "This acquisition was a result of a competitive process as part of Petrobras' divestment plan," Statoil spokesman

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— Erik Haaland

NEWS BRIEFS

U.S. Natural Gas Pipeline Exports to Mexico Decline to Lowest Level Since '15

U.S. natural gas pipeline exports to Mexico over the past three days have declined to their lowest level since June 2015 to 2.4 billion cubic feet per day, down from 3.8 bcfd, because of maintenance on the NET Mexico pipeline in Texas, Reuters reported Tuesday. To compensate, the first tankers from the United States have started to deliver liquefied natural gas to Mexico's Altamira terminal in the Gulf of Mexico.

Brazil Grants Wind Power Projects Priority Status

The Brazilian Ministry of Mines and Energy has granted four wind power projects priority status by allowing them to issue infrastructure debentures, Renewables Now reported Tuesday. The permits will give the projects, which have a combined capacity of 112 megawatts, the priority status that is needed to speed up the implementation process, according to decrees published last week by power sector regulator Aneel. All four projects are located in Bahia state. The contracts were awarded during the 2015 reserve energy auction, and are expected to come on line by Nov. 1 of next year. Two of the projects belong to the Brazilian wind company Casa dos Ventos, while the other two belong to the local arm of EDP Renovaveis.

Colombia's ISA Selling $243 Million in Bonds

Colombian state-owned electricity company ISA on Tuesday offered 700 billion pesos, or $243.7 million, in local bonds to help finance company investments, Reuters reported. The bonds will mature in seven, 15 or 25 years as part of a plan to issue 3.5 trillion pesos in debt, the company said in a filing with the financial regulator on Monday. ISA has already sold 2.3 trillion pesos worth of bonds.

Erik Haaland said. The deal was "duly reviewed and approved by the Brazilian anti-trust agency, the National Petroleum Agency, as well as the partners in the license, and closed as of Nov. 22."

Peru to Sell $5.4 Bn in Bonds to Finance Petroperú

The Peruvian government is planning on issuing as much as $3 billion in bonds to the international market in the first half of this year in order to finance state oil company Petroperú,

Tamayo // File Photo: Peruvian Government.

Minister of Energy and Mining Gonzalo Tamayo said Tuesday, Reuters reported. The revenue would be used to help modernize the firm, he said. The government plans to update the country's largest oil refinery, Talara, which would require approximately $5.4 billion in investment.

RENEWABLES NEWS

Argentina Seeks China's Support for 300 MW Solar Project

Argentina's Ministry of Finance said it has sent a delegation to China to discuss, among other things, financing details for a 300 megawatt solar project planned for Argentina's northern Jujuy province, PV Magazine reported Tuesday. Chinese state-owned Export-Import Bank of China is expected to provide $400 million in funding for the project, which consists of three Cauchari solar projects, each with 100 MW of generating capacity. The projects are being developed by state-run energy company Jujuy Energy and Mining State Society, or JEMSE. A statement from the Jujuy government in September said JEMSE had invited Chinese companies Power China, Shanghai Electric and Talesun to collaborate on the solar project. The government of Jujuy won the three solar projects during the first national renewable energy auction under the RenovAr program in October, and the price of each installation is $60/MWh. A total of 916 MW of solar projects were awarded during the first two rounds of the tender last year. The next round is expected to launch in May.

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risk the possibility that its contract could be terminated in five years. We may consider, as a point of reference, the oilfields in Bakersville, Calif., which are presently operated by Chevron. The fields went into production about the year 1900. In 1960, Shell Oil Company decided to invest in a new technology called steam injection, and the result was a 25 percent increase in production. Today, the fields are still in production, and more than two billion barrels have been extracted. Under today's rules in Mexico, there would never be this happy ending."

A R. Kirk Sherr, member of the Energy Advisor board and president of Clearview Strategy Group: "The 7.9 percent decline in Pemex's proven crude reserves this year versus last year (and 17.8 percent for natural gas) puts it in good company with most international oil companies. ExxonMobil, Shell, Total and Statoil all saw their reserves drop last year. Many countries are in a similar situation, especially in Asia, where China, Indonesia, Malaysia and Thailand also had reserves decline in 2016. The culprit is the same all over the world: low oil prices since mid-2014 and considerable uncertainty about future prices have led to drastic reductions in exploration and production budgets. Mexico's dramatic overhaul of its energy sector since 2014 is a huge step in the right direction. The big success of the deep-water fields auction in December 2016 was a critical move forward on the path toward greater exploration investment, even if expected production upside is five to ten years-distant. Mexico must continue to focus squarely on attracting upstream investment by making Mexico the best location to invest. Attention should be given in upcoming auction rounds to the contract terms that would boost production. Producers adjust their investment plans dynamically in response to changing fiscal regimes, politics and technology. To attract long-term oil and gas investment, policy stability is critical. That said, the nine years' reserve estimate should be understood in Mexico as a flashing red warning light that leaders must exercise considerable care in the months ahead. The policy mix that attracted large investment commitments must stay in place (or even improve) to see the investments through."

"Mexico must continue to focus squarely on attracting upstream investment by making Mexico the best location to invest."
— R. Kirk Sherr

A David Shields, independent energy consultant based in Mexico City and editor of Energía a Debate: "Oil reserves figures often give a distorted picture of the potential to produce oil in the future. Mexico's CNH has just reported that the country's certified proven reserves of conventional oil have fallen from 9.7 billion barrels in 2015

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Brazil's Renova Sells Wind Farm to AES Brazil

Brazilian renewable energy company Renova Energia sold a wind farm project to the local unit of Virginia-based AES Corp. for 600 million reais, or $192 million, Reuters reported Tuesday. The sale will infuse the company with a much-needed cash flow. In a securities filing, AES Tietê Energia said it is planning to assume the 1.150 billion reais in debt owed by the Alto Sertao II project sold to the company by Renova. The value of the deal could increase by 100 million reais in the next five years, depending on the project's performance.

POLITICAL NEWS

Moreno Confirmed as Ecuador Election Winner After Recount

Ecuadorean election officials on Tuesday confirmed leftist Lenín Moreno as the winner of the country's April 2 presidential runoff, following a recount of nearly 1.3 million votes, the Associated Press reported. The recount of about 10 percent of the ballots cast showed that Moreno

Moreno // File Photo: Ecuadorean Government.

defeated his rival, conservative former banker Guillermo Lasso, by a slightly larger margin than in the initial tally, though still by less than three percentage points. "The recount is over, and it has ratified the results," said the president of the National Electoral Council, Juan Pablo Pozo. Lasso had called for a full recount of all the ballots cast in the runoff, but election authorities agreed to only a partial recount. Lasso, who has alleged fraud in the vote, said the partial recount was a show to legitimize an election that has been "anything but transparent," the AP reported. Lasso's campaign said it had evidence of several inconsistencies during the election, including ballots with errors and missing information. International groups, including the Organization of American States, monitored the election and said they detected no irregularities. Moreno is expected to take office on May 24.

ADVISOR Q&A

Has the United Nations Mission Succeeded in Haiti?

Q **The U.N. Security Council voted on April 13 to end the United Nations' peacekeeping mission in Haiti, known as MINUSTAH, which has been present in the Caribbean nation for 13 years. The decision will mean the withdrawal of the more than 2,300 U.N. military personnel in Haiti by October. The vote creates a follow-on mission of 1,275 police who will remain for an initial six months. Has MINUSTAH succeeded in Haiti? To what extent did Haiti's cholera epidemic, which was linked to U.N. peacekeepers, taint and undermine the mission? What conditions in Haiti have led to the planned withdrawal, and what are the implications for the country's fragile security situation and political system?**

A **Georges Fauriol, senior associate in the Americas Program at the Center for Strategic and International Studies:** "The most noteworthy indicators of contemporary Haiti do not provide much comfort to assess the closure of the U.N. Stabilization Mission in Haiti (MINUSTAH): an almost perfect record of abysmal national governance, let alone the near-continuous direct engagement of the international community for more than two decades. The United Nations' post-2004 mission did provide an overlay of security and an institutional beachhead for the response to the 2010 earthquake. But the period is also marred by declining institutional credibility and sense of purpose, made worse by the U.N. system's own ineffectiveness in coming to grips with allegations of sexual violence, and literally, importing a cholera epidemic. The tone of policy expediency in the United Nations' decision also resonates in Washington. But the timing might be unfortunate as it comes in the wake of an 18-month electoral crisis, only stabilized with the inauguration of Jovenel Moïse as president more than two months ago. The latter may be well-intentioned but is untested. Consumed by crisis, Haiti and its international supporters failed to anticipate the obvious. Before MINUSTAH packs up—and counter-intuitively perhaps—Haiti can articulate a different vision of international commitment linked closely to its profound governance needs. One model might be a variation of the International Commission against Impunity in Guatemala (CICIG), itself made possible by the pre-existing mandate of the United Nations in Guatemala (MINUGUA). This model has its many detractors, but for Haiti could provide a layered commitment of institutional support, integrating elements of judicial reform and good governance, let alone policing, as now envisioned by the United Nations."

EDITOR'S NOTE: More commentary on this topic appeared in Wednesday's issue of the daily Latin America Advisor.

NEWS BRIEFS

Haiti Announces Plans to Rebuild Presidential Palace

Haiti's government said Wednesday that it will rebuild the country's National Palace, which was severely damaged in the country's devastating 2010 earthquake, the Associated Press reported. A new palace will "make the connection between the history, culture and future of the Haitian nation," said President Jovenel Moïse. A new reconstruction commission includes Haitian historians and architects, said Moïse. The government is likely to open a competitive bidding process for the project this year. The ruins of the earthquake-damaged palace were demolished in 2012.

Peru's Government Expecting 4.5 Percent Economic Growth in 2018

Peruvian Finance Minister Alfredo Thorne said Wednesday that the country's economy will recover in the coming years thanks to investment in construction following recent flooding, Reuters reported. "The shock will be temporary," Thorne said. He estimated that the economy will grow by 4.5 percent next year and by 5 percent in 2019, up from a previous projected 3 percent in 2018 and 3.8 percent in 2019.

El Salvador's Coffee Exports Grow 29 Percent

El Salvador's coffee exports increased by 29 percent in March year-over-year as the crop recovered from an outbreak of the roya leaf fungus that destroyed the harvest last year, the Salvadoran Coffee Council said Wednesday, Reuters reported. The country shipped 66,819 132-pound bags of coffee in March, as compared to 51,813 bags during the same month a year earlier. El Salvador has been one of the countries hardest hit by roya, also known as coffee leaf rust, in the Central America and Mexico region.

Paraguay's Cartes Backs off Attempt at Re-election

Paraguayan President Horacio Cartes on Monday said he will not run for re-election, local newspaper ABC Color reported. Cartes made the statement in a letter to the archbishop of Asunción and said his decision was inspired by a call by Pope Francis for peace and dialogue in the South American country. "I hope this gesture of renunciation serves to deepen the dialogue aimed at the institutional strengthening of the republic," Cartes said in his letter to Monsignor Edmundo Valenzuela.

Cartes // File Photo: Paraguayan Government.

Cartes' statement came more than two weeks after Paraguay's Senate secretly approved legislation to amend the Constitution in order to allow him to seek another term. The action led protesters to set fire to the Congress building. The country's Constitution has banned presidential re-election since it came into force in 1992 following the fall of a brutal dictatorship in 1989, Reuters reported. The lower house of Congress has not yet acted on the constitutional amendment, but Senator Lilian Samaniego of the president's Colorado Party said Cartes' allies would continue to seek the lower chamber's approval, the wire service reported. A popular referendum would be required, however, in order for the amendment to be implemented. However, the party's leader, Pedro Alliana, said the Chamber of Deputies was unlikely to vote in favor of the amendment. "If [Cartes] is not a candidate, I can assure you that the chances of the amendment passing in the lower house are minimal, practically impossible," said Alliana. [Editor's note: See related **Q&A** in the April 13 issue of the Advisor.]

ECONOMIC NEWS

Mexico Rises in Investment Confidence Survey

Mexico saw a bump in its global ranking for foreign direct investment confidence to 17th place overall from 18th last year in A.T. Kearney's yearly index, The Wall Street Journal reported Tuesday. The index surveys global business executives, measuring their confidence in and likelihood of investing in a country's economy. The United States held its ranking as the number 1 place to invest and with Canada in fifth place. Last year, Mexico's ranking in the index plummeted from ninth place to 18th place as investor confidence waned amid a global drop in oil prices and flagging enthusiasm for national economic reforms, such as the opening of the energy sector. The lower ranking also came as U.S. President Donald Trump was campaigning for election on a platform of renegotiating the North American Free Trade agreement to make it more favorable to the United States and punishing U.S. companies for moving some of their manufacturing facilities abroad to Mexico. This year, Mexico was able to nudge its ranking up despite the concerns, indicating its fiscal and monetary stability, and that investors still find its economy attractive, said Ricardo Haneine, the head of A.T. Kearney's Mexico office. He added that uncertainty over the renegotiation of NAFTA has diminished as it has become more likely that checks and balances in the U.S. government will prevent the overhaul from being unreasonable.

Chilean Stock Market Sees Best Quarter Since 1999

The Chilean stock market saw its best quarterly performance since 1999 in the first three months of this year, Reuters reported Monday. The stock market's IPSA index increased 17 percent year to date, slowing slightly in April.

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to 7.6 billion in 2016. That would suggest that Mexico's oil is 'running out' fast. But remember that proven reserves are those that are recoverable from known reservoirs with existing equipment, under existing operating conditions and at current prices. The figures do not include prospective resources, that is, technically recoverable oil in unexplored areas, which can be vast, especially if unconventional oil—shale deposits—is considered. Low oil prices probably account for much of the recent drop in Mexico's reserves figures, as some deposits become unprofitable and are no longer tallied. But Mexico's reserves have been falling for decades, due to a lack of investment in exploratory drilling, so there is a serious structural problem. Discoveries have been few, and giant oil fields have been depleted. New reserves need to be proven through drilling, and this may happen gradually, thanks to recent energy reforms bringing in new players. But the real challenge for Mexico and its reforms will be to introduce fracking with new technology to develop giant shale deposits in the northeast of the country. This is easier said than done, as legal, environmental, security and social conditions can be different from those in the United States, where frackers have hard-gained knowledge of subsoil conditions. But fracking is the only real option to reverse the decline in Mexico's oil output."

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>
> **— David Shields**

A **Benjamín Torres-Barrón, head of the energy, mining & infrastructure practice group at Baker & McKenzie in Mexico:** "The projected scenario on oil reserves depend on a combination of several factors. The first is a decrease in investment for well drilling and exploration activities that makes difficult the incorporation of new reserves findings; second is the maturation of oil wells that have entered into a stage of declination and, third, the lack of technological platforms for extraction. Expansión reported that, 'according to information from Pemex and the CNH, in 2016, Pemex made 125 drilled wells, having a loss of 55 percent in comparison with 2015, when it drilled 278 wells. Furthermore, in 2016, Pemex performed 22 exploratory well drillings, of which only six were successful. That means the company had an exploratory success rate of 29 percent.' Mexico with its energy reform is taking some steps in order to mitigate the risk of running out of oil, such as 1) the bidding processes; 2) the hydrocarbon exploration and extraction agreements; 3) Pemex farmouts; 4) the Recognition and Surface Exploration Authorizations (ARES); and 5) the new industrial recesses, such as the exploration and exploitation of hydrocarbon deposits in deep water, as well as shale gas and shale oil, among others. Mexico's oil sector ended up at the described situation because of the state control and energy monopoly that the country had before the reform in 2013. There is a risk of depleted reserves being a recurring issue for the country if the trends of decline and of decreasing production are not demolished; notwithstanding, the energy reform is a legislative mechanism that constitutes an opportunity for the reactivation of the hydrocarbons sector."

The Advisor welcomes comments on its Q&A section. Readers can contact editor Gene Kuleta at **gkuleta@thedialogue.org**.

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