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Will Pemex Be Able to Reverse Declining Reserves?

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Q and A: Will Pemex Be Able to Reverse Declining Reserves?

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In 2008, Mexico enacted some reforms to its hydrocarbons sector in an effort to turn around a decline in crude oil output. Despite the reforms, proven crude reserves dropped for the 12th year in a row last year. In an effort to encourage foreign involvement, Pemex will auction several oil field contracts this summer, with as many as 20 awarded by the end of next year. Will the contracts attract outside cash and technology, and will that be enough to increase Mexico's oil output? What structural changes at Pemex could improve the company's chances for increasing production?

A: José Alberro, director of the Berkeley Research Group and former CEO of Pemex Gas and Basic Petrochemicals:

"Which country's oil production grew the most during the period 2004-2010? Not Brazil (577,000 bpd); not Azerbaijan (732,000 bpd) and not even Angola (887,000). Surprisingly it is Mexico, if Cantarell's production is excluded. Cantarell's production peaked at 2.2 million bpd in 2004 and reached 500,000 bpd last year. The facts that Mexican proven reserves dropped for the 12th consecutive year in 2010 and that total production was 24 percent below its 2004 maximum are attributable to the declination of that aging field. Given that total oil production in Mexico decreased by only 800,000 bpd, 'non-Cantarell' production grew 900,000 bpd, a rate that tops any other crude oil producer. Oil production is expected to increase in 2011 and reserve additions to cover 100 percent of production, a noteworthy turnaround. Pemex's investment in oil exploration and production is starting to pay off. On the other hand, Pemex recently introduced NAFTA inspired performance based contracts ('contratos integrales') to attract private investment to brown fields abandoned since the 70s. Pemex will auction these contracts to develop three zones that cover more than 115 square miles and have 3P reserves of 200 million barrels: Magallanes, Santuario and Carrizo. While these are service contracts (Pemex retains full ownership of both the oil produced and the reserves), Pemex only pays for the oil it receives. In turn, the contractor's earnings entirely depend on its ability to produce large quantities of oil at low cost. The hope is that the application of modern technology will increase recovery factors, thereby bringing additional production in line. If the contraltos integrales do attract outside cash and technology, they will be used to develop other areas around Tampico, Chicontepec and deep-water reserves that could amount to 30 billion barrels. Pemex had been able to resist the market forces unleashed by NAFTA that have been shaping Mexican industry for 17 years but an open economy cannot indefinitely shield such a large sector. The 2008 timid reforms to the hydrocarbons sector symbolized the beginning of the end of insularity. The modernization of Pemex is a work in progress. Its heaviest encumbrance remains the government, which forces it to pay subsidies for the consumption of LPG and gasoline ($2 billion and $2.3 billion respectively). That amounts to 20 percent of its capital expenditures and it significantly dampers the current administration's ability to implement its most ambitious programs."

A: Duncan Wood, professor and director of the International Relations and Canadian Studies Programs at the Instituto Tecnológico Autónomo de México:

"Pemex's new incentive-based contracts have been highly controversial since their announcement two and a half years ago. A long-running legal challenge was finally resolved last year, but serious doubts remain over their potential impact on Pemex's production and reserve numbers. The initial two rounds of contracts have focused on on-shore declining or abandoned fields, with Pemex hoping that private contractors will be able to get more oil out of wells that the company itself no longer sees as profitable. In these fields, we have seen some interest from private companies, and there will be some small increments to Pemex's production, though nothing to dramatically turn around the general stagnation of production. The big test for the new contracts will come later this year; in the summer, Pemex hopes to issue some shallow-water contracts, which could potentially have a big impact on production as the oil is there to be exploited, and in late-2011 or early-2012, the company will issue contracts for deep-water E&P near the Perdido Basin, where the vast majority of Mexico's undiscovered oil reserves are thought to be. The deep-water contracts will be significant because they hold the potential to dramatically raise Pemex's proven reserves, although large-scale production will take years to develop. The big question mark here is whether private companies will be willing to take the risks involved. Deep water drilling in the Gulf of Mexico is thought to run at around $250 million per well; if oil is not discovered, then that is an expensive prospect, particularly as the upside of the deal is not booking reserves but receiving a higher payment. In order to spread the risk, we might see consortiums of private companies bidding for each contract, although there has been little sign that this is imminent. Overall, the incentive-based contracts are a positive step forward, although the current state of play does not suggest that they will come close to solving Mexico's oil problems."

A: David Shields, independent energy consultant based in Mexico City:

"The reforms enacted at the end of 2008 probably did not go far enough and, alas, they are only just being implemented. The first three so-called 'performance contracts' have now been tendered for drilling in three fields in Tabasco state, but Pemex foresees output of only 50,000 barrels per day from these contracts. That is minuscule for a giant like Pemex. Also, a new constitutional challenge to the contracts has just been filed by Tabasco municipal governments. Pemex officials say they may award up to 20 such drilling contracts this year and get crude oil output back up to 3.3 million barrels a day by year 2025, against 2.55 million currently. Hopefully, they will. But for now, these words have yet to be turned into deeds. Officials have been wrong in their forecasts and created false expectations in the past. Should we believe them now? They point out that the sharp downward decline in output over the past five years has now stabilized and that production should now gradually increase. Indeed it should, unless poor industry practices are applied to the oilfields to give short-term output a boost, at the expense of long-term results. Another slide in output cannot yet be ruled out. No new giant oilfields have been discovered. The new contracts look like too little, too late and, so far, have not engaged major international players. It may be that, in 2013, a new government will want to look seriously at wider reforms."

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