

# Mexico's Looming Fracking and Offshore Oil and Gas Bonanza

by Steve Horn

After generations of state control, Mexico's vast oil and gas reserves will soon open for business to the international market. In December 2013, Mexico's Congress voted to break up the longstanding monopoly held by the state-owned oil giant *Petroleos Mexicanos*—commonly called Pemex—and to open the nation's oil and gas reserves to foreign companies.

The constitutional reforms appear likely to kickstart a historic hydraulic fracturing (“fracking”) and deepwater offshore oil and gas drilling bonanza in the Gulf of Mexico. “This reform marks a major breakthrough in Mexico's economic history only comparable to the signing of the North America Free Trade Agreement (NAFTA) in 1992,” international investing and banking giant Banco Bilbao Vizcaya Argentaria (BBVA) wrote in a January 2014 economic analysis.

What does this mean for the oil and gas industry in Mexico? And for the workers and those who live above these oil and gas plays or along the pipeline routes that will funnel the liquids to refineries? And how about the Earth's atmosphere?

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## Can the country spare the precious freshwater supplies needed for fracking?

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Can Mexico's fossil fuel infrastructure handle the boom? Can the country spare the precious freshwater supplies needed for thirsty fracking operations in an era of increasingly severe droughts and drinking water shortages? Can environmental, safety and public health regulations possibly keep up with this industrial boom?

### Full circle: History of Mexican energy reforms

The contemporary history of Mexico's energy industry started in 1938 when the federal government kicked out foreign oil companies and nationalized the oil and gas sector under the Pemex banner.

As a recent report published by the Congressional Research Service explains, nationalization occurred in the aftermath of a bitter labor dispute between Mexican workers and the international oil and gas firms who wanted to gain a foothold in the country. The report explains:

Tensions culminated in President Lázaro Cárdenas' historic 1938 decision to abandon efforts to mediate a bitter labor dispute between Mexican oil workers and foreign companies and instead follow through on his threat to expropriate all U.S. and other foreign oil assets in Mexico.

Upon its creation in 1938, Pemex became a symbol of national pride and...united a disparate Mexican society against foreign intervention.

For 75 years, Pemex alone had access to Mexico's massive oil and gas reserves. Mexico is the world's ninth largest producer of oil, and revenues

from developing the resource fund roughly one-third of the country's budget.

But Enrique Peña Nieto of the Institutional Revolutionary Party (PRI), elected in July 2013, has made the “open door” energy reforms—on top of reforms in a whole host of other policy spheres—a top priority for his administration as part of his “Pact for Mexico.”

There's some historical irony at play here: Nieto's PRI is the party that nationalized the Mexican oil industry to begin with.

And the constitutional amendments also bring labor relations full circle, as the new board of directors for Pemex won't include union representation, even though a labor dispute served as the rationale for nationalization back in 1938.

All five union representatives have been removed from the board of Pemex, which is shrinking from 15 to 10 members.

### Gold rush

Proponents for Mexico's energy reforms envision a gold rush. They argue the constitutional amendments and accompanying secondary legislation still up for debate in the Mexican legislature

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could add as much as \$35 billion in outside investment into the national coffers.

Pemex says \$25 to \$60 billion could come its way as a result of joint ventures it can now sign with international oil and gas companies, while the industry-funded Manhattan Institute says 2.5 million jobs and more than \$1 trillion in revenue could be created by 2025.

*Texas Observer* investigative journalist Shannon Young is skeptical of the figures being tossed around, however. “[E]ven without the details, the business press has predicted energy reform could

bring in [billions of dollars] in private investment in Mexico,” Young wrote in February 2014. “How that figure was reached is unclear, as is how much money investors expect to take out of Mexico.”

Regardless, the reforms seem certain to boost oil and gas production, which have lulled in recent years. Since reaching an all-time high in 2004, oil

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production has fallen by 25%, down to 2.5 million barrels per day currently. Contrast that to Texas, just across the border. There, production increased by more than 150% during those same 10 years, according to Daniel Yergin.

Texas’ gains are tied primarily to fracking, which has allowed drilling companies to tap into the Eagle Ford Shale and Barnett Shale basins. “We can see what is going on in the United States. Shale gas in the United States created a sense of urgency for us,” Pemex CEO Emilio Lozoya told Yergin in an article appearing in *The Wall Street Journal*. *The Oil and Gas Journal* pegged it at 10.2 billion barrels at the end of 2011. But that’s just what they know they have.

The country’s unexplored oil reserve potential is second only to the Arctic Circle, according to Bloomberg and others reporting on the reforms. Pemex estimates, as reported by Bloomberg, that deep-water Gulf of Mexico prospects could be as large as 26.6 billion barrels of oil. Onshore, there are potentially 60 billion barrels yet untapped.

So where exactly are the goods?

While new companies looking for a foothold in Mexico are likely to explore and develop oil prospects in all regions, to some degree, the big prizes and most attention will likely center around:

- the deep-water offshore oil plays in the Gulf of Mexico;
- the shale gas plays in the Burgos Basin;
- and the tight oil and shale gas plays in the Chicontepec field.

### The players

Speaking at the recent CERAWEEK energy conference in Houston, Lozoya invited the oil and gas industry big boys into Mexico with open arms.

“Capital from all over the world is welcome in Mexico,” he said. “We hope to have hundreds of companies operating in any type of rock formation, be it shale, or shallow water, or mature fields, or deep water projects.”

So what companies are likely to accept Lozoya’s invitation and cash in on the bonanza?

- ExxonMobil
- Chevron, Shell, BP
- EOG Resources
- Eni S.A.

- Anadarko Petroleum
- Lukoil
- ConocoPhillips
- Chesapeake Energy
- GDF Suez

In its January 2014 report on the energy reform, investing and banking giant Banco Bilbao Vizcaya Argentaria (BBVA) listed a number of American, foreign and multinational companies that could potentially get involved in Mexican expansion. On top of some listed above, BBVA named: Hess (for deep offshore drilling); Diamond Offshore, National-Oilwell Varco, Cameron, FMC, Trico Marine, SeaDrill, TransOcean, Geoservices, Baker-Hughes, Smith International and Schlumberger (for offshore logistics and drilling); Schlumberger, Baker-Hughes, Halliburton and Weatherford International (for oilfield services).

### “No turning back”

The reform laws are currently undergoing negotiations for another round of secondary legislation, which will formalize how the contracts will be awarded and how royalties and revenues will be calculated.

Recently, Pemex chose the oil and gas fields it wants to control, a process known as “round zero,” with *The Wall Street Journal* and *Bloomberg* report-

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## Pemex wants to keep 83% of Mexico’s technically recoverable reserves to itself or to be shared...

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ing Pemex wants to keep 83% of Mexico’s technically recoverable reserves to itself or to be shared between Pemex and other companies as part of joint ventures. Pemex also wants all of Mexico’s proven and productive reserves.

To the chagrin of some, Pemex didn’t publicly disclose which fields it desired to keep under its wings.

“The fact that Pemex didn’t reveal [the list] speaks badly about the practices of this government in terms of transparency, and it’s a very bad precedent for what comes next with the reform,” Miriam Grunstein, an energy specialist who works at the Mexico City-based Centro de Investigación y Docencia Económicas, said in an interview with *Reuters*. *Reuters* reported the first international bidding process will likely take place in summer 2015, covering 25,000 square kilometers.

“[Thereafter], Mexico is expected to launch an international bid round for oil and gas development rights each year through 2019, each one covering about 20,000 square km,” explained *Reuters*. “[T]here could be additional shale bid rounds in a given year...in line with international best practices.”

On March 12, Juan Carlos Zepeda Molina, president of Mexico’s National Hydrocarbons Commission, said Mexico was ready to release years of oil exploration testing data. It’s a major step for-

ward as Mexico moves to open its oil and gas industry to the international players.

DeSmogBlog will be monitoring the coming bonanza closely and will cover the developments—and especially the risks, dangers and oil/gas industry wheeling and dealing—throughout this revolutionary time in the history of the North American oil and gas industry. In particular, we'll be investigating:

- Public opposition to the energy reforms as a whole, and local opposition to drilling;
- Ecological threats to ecosystems, wildlife, rivers and waterways;
- Does Mexico have enough water to support fracking operations, particularly in this time of long-term drought (or desertification)?
- How will Mexico move all this oil and gas? Examining the infrastructure: pipelines, refineries, shipping terminals;

- What regulations will be enacted and enforced to protect the local environment, public health and safety?
- How will such an influx of shale gas and oil impact the global economics of liquid fossil fuels? How does this extend the lifeline of the popping of the “shale gas bubble?”

As the Atlantic Council wrote ominously in its December 2013 report titled *Mexico Rising: Energy Reform at Last?* “The scale of the reform is breathtaking in its scope and ambition...It will be a bumpy road, but these reforms mean there is no turning back.”

Steve Horn is a Madison, WI-based freelance investigative journalist and Research Fellow at DeSmogBlog, where this piece first appeared. Horn previously was a reporter and researcher at the Center for Media and Democracy.