RICE UNIVERSITY'S **BAKER INSTITUTE**

ISSUE BRIEF 03.17.14

Mexico's Oil Reform: Looking for Metrics of Success

George Baker, Ph.D., Contributing Expert and Scholar, Mexico Center

EXECUTIVE SUMMARY

Mexico's 2013–2014 energy reform promises to bring the country's economic drivers and regulatory institutions in line with the global practices of free market democracies. If successful, this development would be a 180–degree turn. The accomplishment of such realignment is hardly assured, however, because of endogenous political, institutional, and legal constraints that could openly defeat the aims of energy reform or quietly subvert them, even under the guise of success. Energy reform must be coherent with the global oil industry; its success must be measured by the amount and composition of investors who believe in Mexico's resources, public oversight institutions, and rule of law. Success will also be measured by how far energy reform goes in transforming Mexico's national oil company (NOC) into an enterprise that is competitive *outside of Mexico*. If energy reform leaves a stay-at-home NOC, it will not have been worth the effort.



INTRODUCTION

During NAFTA negotiations, Mexico opened its economy to international trade and investment on an unprecedented scale—except for the energy sector. Twenty years after NAFTA came into force, the state still dominates all links of the value chain for both oil and power. Through its state—owned enterprises (SOEs), the state controls access to hydrocarbon resources and their industrial transformation into fuels (including electricity) for transportation, industry, commerce, and residential uses. Through the use of interagency committees, the state sets the terms of commerce and end–user prices.

Regarding the SOEs, however, there is only nominal control by the state. Consider Pemex: In 1992, the company was restructured into five legal entities. One of these, Petróleos Mexicanos y Organismos

Subsidiarios, bears a corporate name that suggests a hierarchical structure in which executives plan and execute from the top down. In reality, the corporate name applies only to this one legal entity, as the law governing decentralized state entities does not recognize "subsidiary" relationships. It is this entity that publishes the financial statistics of the business units, creating the optical illusion of centralized command and control.

The executives in the business units regard themselves as everything but "subsidiary." They make investment, operational, and personnel decisions with little regard for Pemex Corporate. In 1995, the state created the Energy Regulatory Commission (CRE) to promote a competitive market in natural gas transportation and deliverability. Nearly 20 years later, there is no independent

The success of energy reform ... will be measured by how far it goes in transforming Mexico's national oil company into an enterprise that is competitive outside of Mexico.

The 1938 oil expropriation underestimated that in each link of the oil value chain—especially in the upstream—technology is constantly evolving in a global matrix.

natural gas line that competes with even one of Pemex's entities or the state—owned electric utility (CFE).¹ In 2008, the state created a regulatory body to provide technical oversight of Pemex in relation to the exploration and development of Mexico's hydrocarbon patrimony. However, in its five years of operation, the National Hydrocarbons Commission (CNH) has faced resistance from Pemex Exploration and Production, the upstream business unit.

Market structure evolved to obey the facts on the ground. Economic actors became contractors to Pemex or CFE. Investment in infrastructure by private industry was under contract with these SOEs, built with cash from construction loans that were tied to long-term contracts. Thus, directly or indirectly through the implied credit of the government, Mexican taxpayers paid for the build-out of the energy sector. That Pemex is the largest borrower of the Export-Import Bank of the United States conveys the correct impression that the American government backstops its creditworthiness. Energy reform is a tacit admission that this approach to financing would never develop resources or build infrastructure fast enough to sustain demand and stimulate economic growth. An example: Pemex says that in the deepwater area of the Mexican portion of the Gulf of Mexico there are some 500,000 km² with oil and gas prospectivity. With its current technological capabilities, if Pemex were to continue to assess the oil and gas potential of 2,500 km² (unlikely at the current rate of 2-4 exploratory wells per year), it would take two centuries to fully define the potential of the region.

The 1938 oil expropriation underestimated that in each link of the oil value chain—especially in the upstream—technology is constantly evolving in a global matrix. Mexico's mistake was to adopt a policy that supposed that global innovation could be replicated single—handedly at home. It was this mindset that gave birth to the Mexican Petroleum Institute (IMP) in 1965 as a research and training facility. In exploration and production, innovation has come to Mexico secondhand, via oilfield service

companies, principally Schlumberger. Energy reform could, if well-executed, open the door for global innovation to come directly to Mexico and recalibrate efforts toward innovation for export.

LEGAL MATTERS

President Enrique Peña Nieto's administration may have concluded—without saying so explicitly—that the change in oil policy in 1958–1960 was a mistake. That change inserted into the petroleum law the restriction that the state could develop Mexico's oil resources only through Pemex and that Pemex could only pay for services in cash. These restrictions set in motion a halfcentury in which international oil companies kept their skill sets, people, and capital out of Mexico. This exclusion nicely corresponded to the discovery of the giant oil complex known as Cantarell in the 1970s. Revenue from the fields of that complex would be an important source of funds for the Mexican government for the next generation.

Cantarell's decline beginning in 2004 brought down the total level of Pemex oil production. That year, Cantarell produced 2 million barrels of oil a day; within a few years, production there would lose more than 1.5 million b/d. In 2014, Pemex's overall oil production is down by a quarter compared to 2004 and has stabilized at 2.5 million b/d.²

Policy analysts in the Peña Nieto administration and the congress concluded that the state needed to take back the monopolistic powers that were granted to Pemex by the 1958 amendments to the petroleum law and to the Constitution in 1960. If implemented as intended, energy reform will return the authority to create timely oil policy to the state. After facing strong resistance from officials at home and abroad in early fall 2013 on the idea of offering only "profit-sharing" contracts, lawmakers introduced the legal figures of profit sharing, production sharing, and licensing. Borrowed from Brazil's energy reform, in a "Round Zero" the NOC may ask the government to retain those assets

where production and exploration have taken place. Responsibility for holding auctions on oil leases is to fall on the CNH. Industrial and environmental safety is entrusted to a petroleum safety agency, a new institution.³

WORRISOME SIGNS

From abroad, some observers fear that Mexico is trying to do too much, too fast. At the top of the list of concerns is the lack of experienced people and tested institutions of public oversight. An inference from recent public comments Mexican lawmakers and other officials made in Houston is that the state intends to soften its grip on the energy sector, but not release it entirely.

It is worrisome that in all the talk of "reform," the government is silent about market incentives or prices. One basic step toward market discipline, for example, could be to create a state majority-owned corporation with minority partners who own unrestricted stock available in a major exchange. Such a corporation already exists in Mexico's oil sector. Compañía Mexicana de Exploraciones (COMESA) was founded as a joint venture between Pemex and Schlumberger, the premier oilfield service company in Mexico. COMESA is currently developing a strategy to enter international markets. This is the corporate structure and growth strategy that the state should choose for its NOC, which should be publicly traded. No one in authority in Mexico, however, openly supports this.

There are foreseeable opportunity costs ahead. If Pemex remains nothing but a restructured government agency, it may become more efficient at home, but it will not obtain permits to operate in federal lands and waters of other countries, starting with the United States. Pemex will continue to lag behind other NOCs, such as Statoil, Petrobras, and Ecopetrol, which have blocks in the US Gulf of Mexico.

Another opportunity cost in not moving ahead with a public company is the loss of market feedback. At present, the state

operates in the dark—with press stories and rumors—regarding global market perceptions of its decisions on investments, corporate structure, and executive recruitment and retention. A hypothetical: if Pemex's stock had been trading at \$100, the February 7, 2014, announcement that its longtime CEO for exploration and production had resigned could have caused the stock to fall or rise—a market signal to Pemex and the government.

Oilfield safety is also a concern, as Pemex has been self-regulating. There appear to be no federal inspectors who are oil geologists or engineers and whose careers are in government service. Regarding safety in deepwater operations, Pemex is on its own. The Marine Well Containment Company, created by a consortium of oil companies after the Macondo accident in 2010, excludes Mexico from its charter. The Center of Offshore Safety, however, is currently developing an offshore-inspector training curriculum. If this program materializes as a result of the reform, there could be new training opportunities for Mexican inspectors, which could create a common set of safety regulations for the entire Gulf of Mexico.

Innovation is stifled as well by an inadequate and often unenforced intellectual property framework and a general lack of competition in the sector. In addition to these obstacles, Pemex professionals need to be released from the mental prison of the Federal Employee Accountability Act. Pemex employees are subject to civil and even criminal prosecution for actions or omissions that are deemed to have caused losses or economic damages to the state. Authorities impose large penalties4 to pay for such losses or damages. In relation to innovation, the effect is paralysis. Innovation comes as a result of a process of trial and error. Understandably, no one in Pemex or the IMP wants to risk losing his or her family's savings as a result of a federal auditor's career ambitions. The opportunity cost of limiting—or eliminating—the freedom to experiment is seen in the continued use of an anachronistic procurement system that drives prices, quality, and innovation downhill.

If implemented as intended, energy reform will return the authority to create timely oil policy to the state.

The opportunity cost of limiting — or eliminating — the freedom to experiment is seen in the continued use of an anachronistic procurement system that drives prices, quality, and innovation downhill.

Finally, the government has not invested political capital in changing the national oil narrative. They say that the energy reform will create new institutions and bring in global capital and investors, but leave its populist, globalphobic narrative untouched. That narrative— the story of a charismatic leader who stood up to foreign oil companies in the 1930s and created a national company that would serve Mexican interests—does not square with a reform that would include global oil companies and investors.

CONCLUSIONS

The metrics of success reside in working out these concerns. At present, Mexico's energy reform defines success purely in Mexican terms, leaving ample room to worry. On the oil side, the reform may be judged a success if a major American oil company chooses to participate in a Mexican public tender for a stand-alone block. Willingness to participate will signal to markets and investors that Mexico has met the critical tests of transparency, sanctity of contracts, fair regulation, environmental stewardship, and fiscal terms that are competitive with opportunities in the United States and elsewhere.

Willingness to participate in a CNH public auction will likely bring immediate benefits, strengthening the exchange rate and lowering the cost of borrowing for government and private sector. These benefits will accrue to Mexico years before the first incremental barrel of oil is produced.

The outlook for those benefits will be very different if it turns out that as a state enterprise in the form of a "Pemex 1.5" or a "Pemex+," the state continues to dominate the upstream as a result of excessive rulings in favor of Pemex by the CNH in Round Zero or on the approval of joint ventures with other companies. For a Pemex that can one day operate outside of Mexico—a Pemex 2.05—the company needs competition. Such competition will not come in an upstream world in which every kid on the block is Pemex's partner.

ENDNOTES

- 1. The "CFE" is misleadingly translated as "Federal Electric Commission." The term "commission" in English connotes attributes that have nothing to do with an SOE.
- 2. Any stabilization of oil production is contingent on a successful policy of exploration and increased production to compensate for natural field decline. In recent decades, Pemex's exploration efforts have produced only marginal results. It would be 10 years—and more than a dozen noncommercial wells—before Pemex's exploration in deepwater areas resulted in a commercial discovery.
- 3. As a correction to the unsuccessful implementation of the 1995 Natural Gas Act, the energy reform decree of December 21, 2013, includes the new legal figure of an independent system operator for the national pipeline grid.
- 4. Examples: Karen Miyasaki (PMI, 2010), Rocío Cárdenas (PMI, 2011), and Aurora Pierdant (Pemex, 2011), among others.
- 5. George Baker, "Mexico's Energy Reform: Powering the Future." Rice University's Baker Institute. Houston, TX, October 31, 2013. See http://bakerinstitute.org/videos/mexicos-energy-reform-powering-future-panel-1-future-shape-energy-reform/.

AUTHOR

George Baker, Ph.D., is a contributing expert and scholar for the Mexico Center at Rice University's Baker Institute. His research is focused primarily on the implementation of the U.S.–Mexico Transboundary Hydrocarbon Agreement of 2012 and the various dimensions of Mexico's 2013–14 energy reform.

See more issue briefs at: www.bakerinstitute.org/issue-briefs

This publication was written by a researcher (or researchers) who participated in a Baker Institute project. Wherever feasible, this research is reviewed by outside experts before it is released. However, the views expressed herein are those of the individual author(s), and do not necessarily represent the views of Rice University's Baker Institute.

© 2014 Rice University's Baker Institute

This material may be quoted or reproduced without prior permission, provided appropriate credit is given to the author and Rice University's Baker Institute.

Cite as:

Baker, George. 2014. Mexico's Oil Reform: Looking for Metrics of Success Issue Brief no. 03.17.14. Rice University's Baker Institute, Houston, Texas.

Rice University's Baker Institute

