

Energy Reform in Mexico: Implications for the United States

Rashide Assad Atala

The Mexican government recently submitted an energy reform initiative to the Mexican Congress. The reform proposal includes measures designed to radically alter the legal framework for oil production in Mexico, including two changes to the Mexican Constitution.

Anticipating this proposal, on June 21st, 2013, three experts on Mexican energy issues gave their opinions about the possible reform, the need for change in Mexico and the potential legal, political and technical obstacles to be overcome. This is a brief report of the discussion that took place at the Woodrow Wilson International Center for Scholars in Washington, DC.

POLITICAL CONTEXT

The first nine months of the Peña Nieto administration have seen an extraordinary amount of Congressional activity in Mexico. Given that the previous two administrations were generally disappointing in legislative terms, the new administration has a considerable mandate for an ambitious reform agenda.

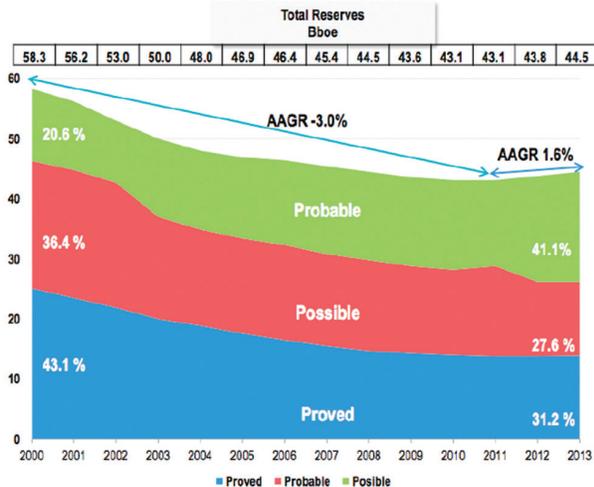
President Peña Nieto and his team are implementing this mandate through the *Pacto por México*, an agreement between the main political parties to promote a series of constitutional reforms: education, labor, telecoms, and financial. The most recent announcements—fiscal and energy—are particularly important, not just in fiscal and economic terms, but mainly for political reasons, since they deal with questions that have the potential to drive a huge breach between the parties.

Just as in 2008, the media has played a crucial role in establishing the energy issue as the prominent reform. It is intriguing to see how, in the last six months, there has been a deluge of newspaper and magazine articles, and television and radio pieces, dedicated to the issue. However, there are two important differences: the first, that everybody now recognizes the urgent need for energy reform; the second, that major statements have been made by the government abroad (in Washington, NY, Berlin, and London), that have not been said at home.

The important thing about the *Pacto por México* is not just the reform agenda it brings, but the dynamic that it has created within and between the three main political parties. On the one hand, Peña Nieto has managed not only to unify his own party, but also to prevent the legislative “tit-for-tat” that everybody was expecting, given the way the PRI behaved during Calderón’s administration. However, the fact that neither of the two major opposition parties is united brings a lot of uncertainty about the future of the energy reform and the *Pacto por México* itself.

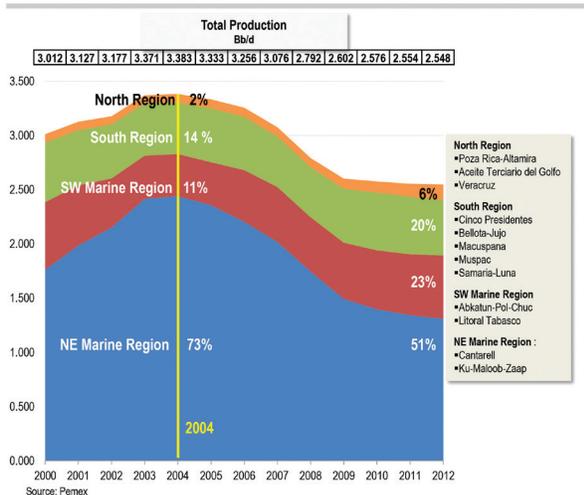
FACTS AND NUMBERS OF THE MEXICAN OIL AND GAS INDUSTRY: WHY THE REFORM IS NEEDED

A. Mexico's hydrocarbon reserves have declined for the last 10 years



Oil production and reserves show an alarming downward trend. Although there have been recent discoveries (Trion and Supremus), Mexican reserves have been falling for the last 10 years, and it was only in 2011 that 100% replacement rates were reached.

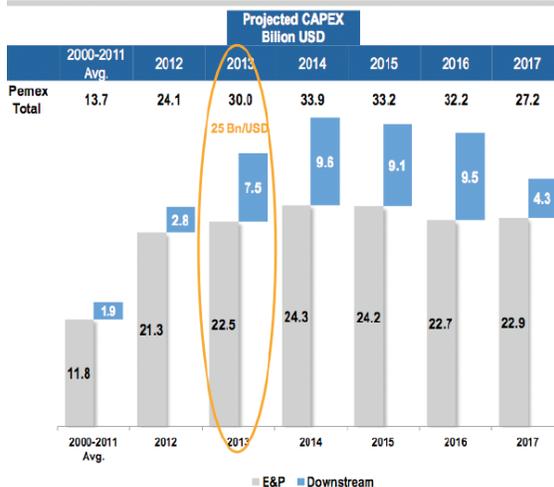
A. Oil production has dropped 835 MBD since 2004



Oil production reached a peak in 2004, when Cantarell produced 2.4 million barrels per day, which accounted for almost 60% of total oil production. With 300,000 barrels per day, it remains a considerable resource but is far from being the backbone of Mexican oil production it once was. Ku-Maloob-Zaap has partly compensated the steep decline in Cantarell, but it only represents one third of national oil production.

The efforts of the Mexican government to compensate for Cantarell's decline can be clearly seen in terms of capital expenditures, which increased from an average of US\$11.8 billion dollars a year from 2000-2011 to a little over US\$23 billion in 2012. On the refining side,

B. Pemex capital expenditure for 2013-2017, expected to increase



Source: Pemex, Business Plan 2013-2017

although the new Tula refinery was supposed to be completed by 2013, the necessary resources in terms of budget appropriation have still not been authorized.

Gas is another story of problems and challenges. Natural gas production went momentarily up in 2009, but it has started to decrease due to fiscal disincentives: international prices are very low, compared to the huge tax burden, which makes gas production non-profitable.

Official projections by Sener show that this administration expects to maintain the same level of investment that would allow production of oil and gas to be up to 3 million barrels a day. However, both the low case and the high case scenarios need shale reserves to start being developed, as well as new fields to be discovered.

ENERGY REFORM PERSPECTIVES

Pacto por México: What has already been stated

The *Pacto por México's* reform agenda has made it very clear that the ownership and management of hydrocarbon resources will remain under the jurisdiction of the Mexican state, and that Pemex will remain the national oil company (Agreement #54). Apart from this, there are 3 main pillars that have been delineated:

1. Strengthening Pemex as a public productive company to compete in an open market:
 - a. Transform Pemex into a "Public Productive Company" (A #55) – at the present time Pemex is a decentralized agency of the state, and is run as a government ministry;
 - b. Create a truly independent Pemex Corporate Board, with capacity to negotiate alliances with other oil companies (A #55);
 - c. Maximize the "economic rent" from hydrocarbons, and introduce a competitive fiscal regime for Pemex and other operators;
 - d. However, it says nothing about the monopoly or the union contract.

2. Reinforce regulatory agencies and their legal capacities to oversee Pemex and private newcomers to the industry:
 - a. National Hydrocarbons Commission (CNH - A #58);
 - b. Energy Regulatory Commission (CRE);
 - c. Federal Competition Commission (CFC);
 - d. Establish obligations for Pemex to adopt efficiency and transparency policies equivalent to other global oil companies (A #58).
3. Introduce a gradual and selective liberalization of the Oil & Gas industry and promote market competition:
 - a. Allow private investment in downstream activities: refining, gas processing and petrochemicals, including transportation, storage, and local sales (A #57);
 - b. However, it does not talk about establishing a new concessions regime (similar to the one in existence for mining) to promote the development of unconventional resources, nor about eliminating price controls.

There is also a very important cross-cutting issue: to promote the development of a local supply chain, the increase in local content, and the development of an indigenous technology base for the oil industry (A #59).

International lessons to be learned

Mexican institutional design of its oil sector is based on the myth that sovereignty equals oil, and oil equals Pemex. Unfortunately, this is hurting Mexico's economic prospects.

The energy revolution that is taking place has not yet permeated the debate in Mexico, and that is probably one of the reasons why the reform was not passed earlier. Mexico is the only country around the world with a sole company in the whole production scheme: from upstream to downstream, which means that there is no competition in any area of its energy industry. Also, while other state-owned oil companies are drilling and developing oil wells in other countries' markets, Mexico has a self-imposed embargo. Essentially, it has isolated Pemex from the rest of the world.

The good news is that Mexico does not need to innovate for its potential energy reform. Mexico could learn, the way Norway has, that the fact that reserves are declining is not fatal if you start to produce in other parts of the world; or it could learn the Colombian lesson of how to create an open and competitive market, for example. But it should also learn the lesson from Brazil: no matter how many resources you have, you need to manage your company in an efficient way in order not to destroy your natural wealth.

There are a lot of options around the world that would allow for Mexico to maintain the property of its hydrocarbons, and it is intriguing to see that even Cuba and North Korea have more open systems than Mexico at this point in time.

Mexico is the only country where a National Oil Company holds a monopoly over the entire value chain of the oil & gas sector

Firm	Country	Joint-ventures in E&P in country of origin?	Private investment in downstream in country of origin?
Sinopec Group	China	Yes	Yes
China National Petroleum Corporation (CNPC)	China	Yes	Yes
Saudi Aramco	Saudi Arabia	No	Yes
Gazprom	Russia	Yes	Yes
Petrobras	Brazil	Yes	Yes
Lukoil	Russia	Yes	Yes
PDVSA	Venezuela	Yes	Yes
Statoli	Norway	Yes	Yes
Pemex	Mexico	No	No
Kuwait Petroleum Corporation	Kuwait	No	N/A
National Iranian Oil Company (NIOC)	Iran	Yes	Yes
CUJET (Unión Cubana de Petróleo)	Cuba	Yes	Yes
North Korean Oil Exploration Corporation (KOEK)	North Korea	Yes	N/A

Source: IMCO

The structure of the industry if a major reform is attained

There are a couple of outcomes that we can be almost 100% sure will happen. The first is that the Mexican state will maintain the ownership of its natural resources, as well as the ownership and control of Pemex, and that it will capture the economic rent through taxes. The second is that Pemex will preserve exclusive rights over conventional resources (meaning onshore fields and shallow water resources).

However, there are two possible scenarios for the Constitutional reform:

- Alliances between Pemex and private operators: This would involve Pemex in all areas of the industry, perhaps through risk contracts for mature fields and production-sharing contracts (or "profit sharing contracts", as they are calling them right now) for deep water;
- Mixed ownership: Concessions regime for exploration and production in shale plays, and different projects for downstream as well as O&G transportation, storage and distribution.



Mexico, the U.S. and the Energy Reform

There is one big “reform” that should have happened a long time ago, but has not happened yet: building infrastructure to connect the U.S. gas industry to the Mexican one. This would allow Mexico to import gas more cheaply than is currently possible, which would directly boost the competitiveness of the whole Mexican economy.

The fact that the United States does not need Mexican oil the way it used to is widely recognized now, which might be one of the reasons for the recent agreement to export Mexican oil to China. The biggest mistake for the Mexican economy would be a lack of ambition in the energy reform because if Mexico does not act fast, it runs the risk that the U.S. and Canada will move ahead in creating a North American energy market that excludes Mexico.

Mexico and the United States have come a long way in energy cooperation, but it is not all that can be done. The U.S. media is just beginning to understand the importance of the Transboundary Hydrocarbons Agreement. It would unitize fields and permit joint development of areas considered potentially rich in resources, and it would decide in advance, subject to further negotiation, the split. The same kind of arrangement could be applied to the Eagle Ford shale formation that crosses the Texas-Coahuila border.

In short, the reform carries far-reaching implications for energy relations between the U.S. and Mexico, and will be followed with enormous interest in the U.S.

Conclusion

The need for energy reform in Mexico has never been clearer, nor has there been such a wide-spread consensus over that need. The decline in reserves and production, the inefficiencies of the state-run monopoly, and the size of technological and expertise gaps between Pemex and the rest of the oil industry mean that the need is now not only obvious, but also urgent.

The world’s oil and gas industry has been transformed in recent years by the shale revolution, the development of new technologies for deep-water and the end of “easy” oil. Due to its isolation, Mexico has been excluded from this transformation and its hydrocarbons sector has stagnated.

The reform must address these issues, and it must be a reform that finds the correct balance between protecting the national interest and moving Mexico’s oil and gas sector firmly into the twenty-first century.

ABOUT THE SPEAKERS

Ernesto Marcos

Ernesto Marcos is founding partner of Marcos y Asociados and has devoted most of his professional career to the development of financing alternatives that better suit the different

needs of the Mexican industrial and infrastructure sectors. Between 1989 and 1994, Dr. Marcos was Chief Financial Officer at Petroleos Mexicanos, one of the largest industrial conglomerates in Latin America. From 1986 to 1989, he was President of Nacional Financiera, Mexico’s development bank. Between 1982 and 1983, he held the position of Undersecretary for State-Owned Industry within the Ministry of Industry. Dr. Marcos has been professor of economic analysis, economic development and economic planning at universities in Mexico and the United States. He has served as chairman or member of the boards of a number of Mexican companies, as Adjunct Governor of the World Bank, the International Financial Corporation, the Inter-American Development Bank and the Inter-American Investment Corporation. He is currently a member of the Board of Empresas ICA, ICA-Fluor Daniel, Fina Oil and Chemical Company and Banco Alianza, among others. Dr. Marcos holds a Ph.D. in Economics from Notre Dame University.

Juan Pardinás

Juan Pardinás is the General Director of the Mexican Institute for Competitiveness (IMCO). Previously, he was a researcher at the Center for Research and Development (CIDAC), and a professor at the National Autonomous University of Mexico (UNAM), the Mexican Autonomous Institute of Technology (ITAM), and the London School of Economics (LSE). For two years he worked in India and Japan as a correspondent for CNN en Español. He is interviewed frequently on several radio and television shows. He has written for several print media outlets, including Nexos, Letras Libres and Este País, and his publications include, “Tú y tu voto construyen la democracia” and “Impuestos un mal necesario.” He holds a Ph.D. in economics from LSE, an M.A. in economics from Sophia University in Tokyo, and a degree in political science from UNAM.

Duncan Wood

Duncan Wood is the Director of the Mexico Institute at the Woodrow Wilson International Center for Scholars. For 17 years, Dr. Wood was a professor and the director of the International Relations Program at the Instituto Tecnológico Autónomo de México (ITAM) in Mexico City. He also held the role of researcher at the Centro de Derecho Económico Internacional (CDEI) at ITAM. He is a member of the Mexican National Research System (level 2), a member of the editorial board of Foreign Affairs Latinoamérica and has been an editorial advisor to *Reforma* newspaper. In 2007, he was a non resident Fulbright Fellow. Between 2007 and 2009, he was technical secretary of the Red Mexicana de Energía, a group of experts in the area of energy policy in Mexico. He has been a Senior Associate with the Simon Chair and the Americas Program at the Center for Strategic and International Studies (CSIS) in Washington D.C. His research focuses on Mexican energy policy, including renewable energy, and North American relations. He studied in the UK and Canada, receiving his PhD in Political Studies from Queen’s University, Canada.