

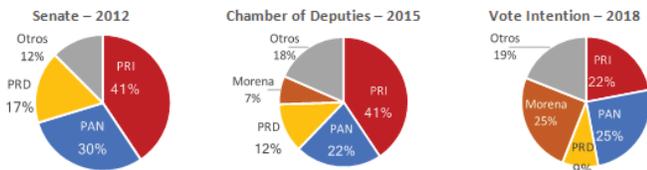
The Future of Mexico's Energy Sector

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Mexico will hold presidential elections in nine months. Regardless of who wins the election, it is a useful moment to consider what the next administration could mean for private investors. What may happen to the progress of the energy reform should the election bring to office a new administration that would slow down and/or delay the implementation of the myriad of measures, projects and legal and regulatory changes? The good news, from our vantage point, is that while political risk is indeed important to understand heading into 2018, there has been significant progress in Mexico on implementation of the energy reform to avoid it from being fully compromised regardless of the outcome of the election.

Beginning in December 2013, Mexico embarked on a path to completely change the paradigm of its energy sector from a whole value chain state monopoly to a sector open to private investment from the wellhead to the burner tip. Making this change possible required unprecedented negotiations across political party lines. The current fragmentation of the political parties in Mexico makes a similar scenario in the near future unfeasible.

Fragmentation of political parties Distribution by political party:



Sources:

<http://portal.te.gob.mx/ventana/resumen/45/2012/composici%C3%B3n-del-congreso-de-la-uni%C3%B3n>;

<http://www5.diputados.gob.mx/index.php/es/Comunicacion/Boletines/2015/Agosto/29/0001-Infirma-Secretaria-General-que-la-composicion-inicial-de-la-Camara-de-Diputados-es-de-498-integrantes>;
<http://www.elfinanciero.com.mx/nacional/lopez-obrador-puntero-solitario-pri-pierde-puntos-tras-el-gasolinazo.html>

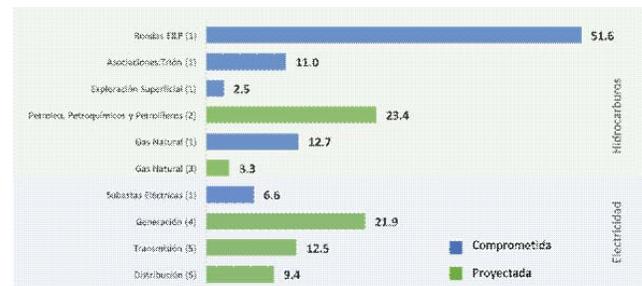
The actual opening of the energy sector based on changing the Articles 25, 27 and 28 of the Constitution, required developing a strong legal and regulatory framework to allow new participants in the sector with new laws and regulations as well as the strengthening of existing regulators and creation of new agencies. This process took less than three years, which stands in stark contrast with other countries where similar market overhauls took four to six years to be in a position to

hold their first public bid round.

Mexico has been successful in designing an internationally competitive legal and regulatory framework incorporating to a great extent industry's best practices. As a result, the bid rounds including auctions and open seasons, held in upstream, midstream and downstream have been transparent and attracted Mexican and international investors from around the world. These investors have made commitments greater than \$80 billion which is certain to have an economic impact and boost employment opportunities and benefits for communities across Mexico. For example, in the upstream segment, 75% of the areas, or blocks, that have been offered have been awarded. The 70 areas are spread across six states in Mexico including: 20 in Veracruz, 19 in Tabasco, 15 in Tamaulipas, 9 in Nuevo Leon, 5 in Chiapas and 2 in Campeche.

These numbers do not include the farmouts that took place in October nor the announced deepwater and shallow water bid rounds to be held in January and March 2018 respectively. Those auctions include 30 areas in deepwater and 35 in shallow water which according to the Secretary of Energy, are expected to attract more than \$30 billion of investment from participating companies.

Investments Committed through the Energy Reform (USD billions)



(1) Investments resulting from tenders made through the Energy Reform. <https://www.gob.mx/sener>.

(2) Investment estimated from the permits granted by the CRE for each activity, through the Energy Reform.

(3) Gas pipelines contemplated (not awarded) in the second annual review (2017) of the Five-Year Plan for the Expansion of the Integrated Natural Gas Transportation and Storage System 2015-2019.

(4) Projected investment by sector in the next 15 years, according to PRODESEN 2017-2031.



As we noted at the outset, the energy sector in Mexico has already experienced a radical transformation which is unlikely to be reversed. There are several reasons why we are confident in the continued evolution of Mexico's energy sector including:

- The legal and regulatory framework provided the National Hydrocarbons Commission (CNH) and the Energy Regulatory Commission (CRE) with autonomy and independence from the federal government. Each has seven Commissioners designated by the Senate with staggered terms to allow for continuity.
- The new administration would not have to incur political costs to continue with the reform implementation, in fact it will start experiencing its benefits.
- Citizens now have options for gasoline service from different providers while the industrial users can negotiate directly for their own supplies of natural gas and electricity rather than depending on the heretofore state-owned monopolies.
- The new private participants in the upstream are already making significant new discoveries which will translate into increasing Mexico's hydrocarbons reserves.
- In addition, this reform is based on a Constitutional change that is politically unlikely to be reversed given the fragmentation discussed above.

Mexico has started the process to create and implement a competitive energy sector with multiple participants. For example, in the upstream bid rounds that have taken place the participants have been Mexican and foreign companies, small independents, majors and investment funds depending on the size and complexity of the blocks offered.

It appears fairly clear that economic activity is likely to increase in the medium to long term, but it is important to note that there have already been and will continue to be near-term economic windfalls for the Mexican treasury derived from the reforms. All participants in the upstream bidding rounds have paid fees to the CNH for the acquisition of the data packages as well as to be allowed to participate in the auctions. Moreover, winning bidders -- those firms that succeeded in gaining blocks during the upstream auction process -- have begun to pay fees to the Mexican Petroleum Fund (FMP) upon contract execution. In addition, the Government, and Pemex in the case of the farmout of Trion, have benefitted from the bonus that companies paid as part of the parameters for breaking a tie and determining the winning bid to partner with Pemex. In addition, Pemex, as the national oil company, benefits from the association with other companies reducing its own capital requirements and giving it the opportunity to have access to the expertise of other operators and international best practices, state of the art technology and training. Beyond what we see as very clear progress in

terms of market opening and economic upside, there are several other areas - strengths and potential weaknesses - in the ongoing implementation of Mexico's energy reform that bear mentioning:

- Mexico has been successful in the opening of its energy sector despite the collapse of oil prices. On one hand, this can be interpreted as an indication of Mexico's prospectivity as well as the terms being offered. However, the downside is the fact that Pemex workers and service providers were not used to capital investment reductions since the monopoly's objective was to maximize production independently of prices. Within the new framework, Pemex has had to adjust to lower oil prices as the industry has done worldwide. As a result, Pemex and its service providers have to be prepared to deal with price volatility and its associated impacts.

- Given the success of the bid rounds held so far and the proliferation of activity and the number of market participants, a challenge to monitor is that of budget and human capital across Mexico's regulatory bodies; it is essential for continued implementation of the reform measures that regulatory agencies have the appropriate number of personnel and be efficient in processing permitting and approvals and avoid becoming bottlenecks. In addition, they will need to be flexible to adapt and change as the industry evolves in the country.

- The permitting process at the state level and the social and environmental liabilities with local communities must also be evaluated and addressed so as not to cause unneeded delays or interruptions in critical project development.

- Security and law enforcement at the local level remains an issue and while some progress has been made, it remains a red flag. The fact that Pemex pipelines are consistently robbed and each year experience increases in the number of illegal taps and quantities of product that is stolen, is not acceptable.

We remain confident that the tremendous amount of progress across the entire energy value chain in Mexico cannot be reversed. However, there are ample reasons to continue efforts to consolidate the myriad reform measures prior to December 2018 in order to avert any interruptions or possible slowing down of implementation. Make no mistake that the main challenge is to maintain the competitiveness of Mexico's energy sector internationally for the benefit of

Mexicans and continue to attract investors willing to bring their capital for exploring and producing, building pipelines and storage facilities, as well as gasoline service stations, and across the other segments of the country's energy sector.

***Women in Energy ("Mujeres en Energía") is a group of women with vast experience in Mexico's energy sector and internationally. Among others the group includes:**

Alma Porres, Aurora Pierdant, Benigna Leiss, Catalina Delgado, Lorena Patterson, Montserrat Ramiro, Rosanety Barrios, Silvia Hernández, Jacqueline Sánchez, and Vanessa Zárate.

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