

Mexico's Gasoline and Diesel Market

Emily Medina

EPRINC Mexico City

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About EPRINC's Mexico Initiative

This brief overview of Mexico's fuels market provides essential background on volumes and trends in the supply and demand of petroleum products. In the near future, EPRINC will initiate a research effort to examine the role and economic importance of petroleum products to the Mexican economy and alternative policy approaches to insure sustained access to competitive priced fuels sourced from both domestic and foreign suppliers. EPRINC has also commenced an in depth assessment of Mexico's long-term potential to expand domestic output of oil and natural gas.

EPRINC is making a long-term commitment to research and analysis of the Mexican energy sector and our programs will provide both essential background information as well as assessments of alternative strategies to address energy supply concerns. The primary purpose of the research and outreach program will be to educate and inform both the public and policy makers on what strategies are likely to be cost-effective in meeting national priorities and contribute to economic growth.

Introduction

The U.S.-Mexico-Canada Agreement (USMCA) contributes to both the strength and sustainability of the North American petroleum renaissance. North American cross-border energy trade is extensive and the movement of crude oil, refined petroleum products, and natural gas contributes to the expanding national economies in the USMCA.

An essential element to ensure efficient energy production throughout the production platform is allowing energy flows to move unimpeded. The expanding trade in petroleum products, especially gasoline and diesel, is a case in point. This trade has been beneficial to the U.S. refining industry by allowing processing facilities to operate efficiently at high volume. Mexican consumers benefit from product exports from the U.S. (and Canada) by gaining access to secure and competitively priced gasoline and diesel fuel. Some Mexican officials have raised energy security concerns arguing that Mexico is too dependent on U.S. supplies and that domestic production should be encouraged or subsidized as a substitute for imports.

Addressing energy security concerns is a complicated issue and will be the subject of a more in- depth treatment of the Mexican petroleum products market in a subsequent report. This policy brief presents an overview of the current gasoline and diesel market in Mexico.



Mexico's Energy Reform

Mexico's energy reform, passed in 2013 by President Enrique Peña Nieto, brought about profound changes to the production and distribution of petroleum products. The reform program created a competitive national energy market by removing the state-controlled monopoly over the distribution of gasoline and diesel fuel.

Prior to the energy reform, all transportation and storage activities were run exclusively by the 75-year state oil monopoly, Petróleos Mexicanos (Pemex). Although substantial reforms have been implemented, a large portion of Mexico's energy infrastructure is still in the hands of Pemex. To create a more competitive and open market in Mexico's energy sector, the government established an asymmetric regulation to break up Pemex's dominant position and allow other stakeholders to be able to compete in Mexico's natural gas market. The Comisión Reguladora de Energía's asymmetric regulation to Pemex forced the company to release 70% of its gas commercialization portfolio representing a volume of 2.5 bcf out of 3.6 bcf total.¹

¹ Garcia, G. (2017, April 20). Mexico's Energy Regulatory Commission: Challenges and Opportunities in Reforming the Energy Industry. Retrieved from <https://www.ceer.eu/documents/104400/-/-/673c31fa-1600-0220-0e5a-2a365a911644>

A central element of the reform package was to move Pemex from a state-owned monopoly to a state enterprise with the objective of competing on an equal footing with private companies. Pemex Logística was founded in 2015 and is the company's business segment responsible for the transportation and storage of petroleum fuels and petrochemicals through pipelines, maritime ports, and ground transportation for Pemex and third-party users, including private sector fuel stations.

Distribution Infrastructure

Decades of corruption and underinvestment in necessary energy infrastructure have led to bottlenecks and inefficiencies in all segments of the energy value chain in Mexico. Furthermore, poor business operations by Pemex have contributed to logistical and distribution constraints throughout the energy complex. Since Pemex controlled the nation's entire fuel market and thus also controlled fuel pricing, there were few incentives for the company to invest in improving its aging infrastructure.

Growing energy demand in Mexico and falling production are both increasing the risk of supply disruptions throughout the national economy, natural disasters, administrative intervention in cross border energy imports, and delays in the import permitting process could exacerbate this risk throughout the country.

After President Andres Manuel Lopez Obrador (AMLO) decided to shut down fuel pipelines earlier this year in an effort to combat fuel theft, many gasoline companies experienced supply shortages. According to Comisión Federal de Competencia Económica, Mexico has only three days of gasoline and diesel storage compared to twenty days in the U.S.²

To mitigate energy supply shortages and increase resiliency to external shocks, companies are looking to diversify their supply by reducing dependence on Pemex and creating their own strategic value chains. Private companies are seeking alternatives such as private truckers to transport gasoline and diesel from marine terminals to gasoline stations. Mexico has a total of 21 maritime import locations for gasoline and diesel³:

- Pacific Ocean: 9 locations
- Gulf of Mexico: 6 locations
- North border: 6 locations

Existing regulatory risks also appear to limit incentives for adequate build out of much-needed storage, distribution, and transportation networks. For example, many of the ports still do not have connecting pipelines that would allow them to transport fuels more efficiently to demand centers.

² *Cómo asegurar mercados competitivos de gasolinas y diésel en México* (Rep.). (2019, January). Retrieved April 01, 2019, from Comisión Federal de Competencia Económica website: <https://www.cofece.mx/wp-content/uploads/2019/01/PPT-GasolinasyDiesel-30012019.pdf>

³ Ibid.

Imports and Permitting Process

Permitting in Mexico is divided between two organizations. Mexico's Energy Ministry (SENER) handles treatment, refinery, and importation permits. The Energy Regulatory Commission (CRE) is responsible for handling transportation, storage, distribution, and commercialization permits.

Since April 1st of 2016, SENER has been in charge of overseeing the permitting process for private sector importation of gasoline and diesel. This policy change sought to increase energy security in the country by creating competition and allowing different companies to be able to import energy supplies from other countries. This also led to an increase in midstream infrastructure investment since the passing of the energy reform.

Fuel Stations in Mexico

Pemex continues to dominate the fuels market with a total of 11,315 fuel stations in Mexico.⁴ However, there are now 52 different brands that compete with Pemex based on price and quality of service. Private owned fuel stations account for 25% of the total fuel stations in the country. In 2017, Pemex reported that the value of gasoline sold in the company fuel stations was 443,050 million pesos (MM\$) and diesel was 210,050 (MM\$).



Demand

Mexico's energy consumption has grown 48% over the last 20 years driven by the transportation and industrial sectors that account for 75% and 36% of that growth respectively.⁵ Mexico's fuel market is the sixth largest in the world with a total demand of 1,178 thousand barrels per day (Mbd). Gasoline accounts for 789 Mbd of the total demand while diesel accounts for 389 Mbd.⁶ Fuel imports in Mexico represent 60% of the country's total consumption. To put this in perspective, Mexico's gasoline market is the fourth largest in the world.⁷

⁴ *Estadísticas Petroleras* (Rep.). (2019, February). Retrieved April 2019, from Pemex website: [http://www.pemex.com/ri/Publicaciones/Indicadores Petroleros/indicador.pdf](http://www.pemex.com/ri/Publicaciones/Indicadores%20Petroleros/indicador.pdf)

⁵ *Diagnóstico de la Industria de Petrolíferos en México* (Rep.). (2018, November). Retrieved April 01, 2019, from Secretaria de Energía website: https://www.gob.mx/cms/uploads/attachment/file/416899/Parte_1_vf.pdf

⁶ Ibid.

⁷ Garcia, D. A. (2018, August 16). U.S. energy chief applauds Mexico's plan to end fuel imports. Retrieved April 01, 2019, from <https://www.reuters.com/article/us-mexico-gasoline-perry/u-s-energy-chief-applauds-mexicos-plan-to-end-fuel-imports-idUSKBN1L1289>

According to Mexico's Energy Ministry (SENER), over the next 15 years, demand growth in the transportation sector will increase 34%.⁸ From 2018 to 2032, it is projected that there will be a 47% decline in fuel imports, while fuel exports will increase fourfold from 2018 levels. This is largely due to increased domestic production projections.

Securing Fuel Supplies Going Forward

The National Refinery System (Sistema Nacional de Refinación) currently processes Pemex's crude petroleum at the rate of 769 Mbd.⁹ Pemex and private company imports supply the majority of Mexico's fuel needs. In 2017, Mexico's domestic fuel supply accounted for 42% of the country's supply. Meanwhile, imports accounted for 58% of the total supply, representing a 10% increase from the previous year. From 2011 to 2017 gasoline imports increased by 41%, going from 405 thousand bpd to 572 Mbd, while domestic production fell by 36% from 400 Mbd to 257 Mbd.¹⁰

With regard to crude oil, the primary feedstock for producing transportation fuels, Pemex went from producing 3.4 million bpd in 2004 to approximately to 1.9 million bpd in 2017.¹¹ This decline in Mexican domestic production led to rising imports of refined products from other countries, mainly the United States, driven largely by its geographical proximity, competitive prices, and abundant supplies. Mexico also imported light crude during the second half of 2018 for processing in its own refineries and to meet growing gasoline and diesel demand.¹²

As part of AMLO's presidential campaign promise to increase energy self-sufficiency in the country, the government has announced the construction of a new refinery in Tabasco called Dos Bocas with a processing capacity of 300 Mbd. This refinery is projected to enter operations by 2022, although there is a high degree of skepticism whether this project will be completed on schedule. This is largely because the project still lacks the necessary permits required by regulatory agencies like the Agencia de Seguridad, Energía y Ambiente.

⁸ *Diagnóstico de la Industria de Petrolíferos en México* (Rep.). (2018, November). Retrieved April 01, 2019, from Secretaria de Energía website: https://www.gob.mx/cms/uploads/attachment/file/416899/Parte_1_vf.pdf

⁹ *PETRÓLEOS MEXICANOS Informe Anual 2017* (Rep.). (2017). Retrieved 2019, from http://www.pemex.com/acerca/informes_publicaciones/Documents/Informe-Anual/Informe_Anuual_2017.pdf

¹⁰ *Diagnóstico de la Industria de Petrolíferos en México* (Rep.). (2018, November). Retrieved April 01, 2019, from Secretaria de Energía website: https://www.gob.mx/cms/uploads/attachment/file/416899/Parte_1_vf.pdf

¹¹ *Estadísticas Petroleras* (Rep.). (2019, February). Retrieved April, 2019, from Pemex website: http://www.pemex.com/ri/Publicaciones/Indicadores_Petroleros/indicador.pdf

¹² *Diagnóstico de la Industria de Petrolíferos en México* (Rep.). (2018, November). Retrieved April 01, 2019, from Secretaria de Energía website: https://www.gob.mx/cms/uploads/attachment/file/416899/Parte_1_vf.pdf