Fuels Institute

The Current Mexican Gasoline & Diesel Market

In January 2020, the Fuels Institute published *Mexico's Energy Reform: Impact of Mexico's Deregulation and Liberalization of the Fuels Market.* That report analyzed the Mexican fuels and vehicles market and evaluated the demand for fuel as well as the status of Mexico's fuel distribution and retail infrastructure. More than one year after President Andrés Manuel López Obrador was elected, market conditions and the outlook for the fuels market in Mexico have changed. As a signatory nation of the U.S.—Mexico—Canada Agreement (USMCA), the status of Mexico's energy reform is of significant importance to the entire North American market. This white paper, written for the Fuels Institute by HCX (the author of the original 2020 report), provides an early 2021 update of the Mexican fuels and transportation market under the leadership of the new administration.

GOVERNMENTAL ACTIONS AND THEIR IMPACT ON THE FUELS MARKET

The oil expropriation carried out in 1938 resulted in the creation of a monopoly controlled by the state-owned oil company Petróleos Mexicanos (Pemex). Over the years, government budgetary control, a chronic lack of investment, and no competition resulted in low refinery and supply performance and a technological lag that limited the actions of the government company. Given Pemex's performance and the need to foster the Mexican energy sector, the federal government began to work on a legal framework that could solve the problems that the company and the nation were facing. Energy reform was established in Mexico in 2013, opening the door to investment by private companies in the hydrocarbon sector. These privatization trends are presented in Table 1.

The energy reform was intended to resolve Pemex's technology gap and foster the development of an open and larger Mexican energy market. However, in the first years of the reform, contrary to what was expected, the economic problems that Pemex faced were exacerbated due to increased competition, higher costs of oil extraction, lower market prices, increments in fuel theft, and growing corruption.[1]

This situation has not changed, and in 2019 alone, Pemex's gasoline sales fell 5.7% while its diesel sales were down 11.5%, representing a company loss of $7.43 million (USD) compared to 2018 earnings.

The energy reform caused controversy in the Mexican political environment before and after its implementation. It was highly criticized by the opposition political party in particular. The current president of Mexico, Andrés Manuel López Obrador, campaigned on promises to reverse the energy reform in order to rescue Pemex from this decadent situation. Once in office, López Obrador promised to make no important changes to the legal framework but has managed to take indirect measures to advance the dismantling of the energy reform.

The federal government has carried out measures that seek to strengthen Pemex, such as making federal investments in the company, restructuring debt, and providing other forms of fiscal support. However, there have also been more aggressive measures that have shaken the industry, such as the cancellation of the oil biddings that were carried out by the previous government between 2015 and 2018. After this, the government promised to honor the previously signed contracts to try to calm investors.

The legal actions taken by the current government have been implemented by regulatory bodies, which issue agreements to reduce the scope of the regulatory framework in support of Pemex. Secretaría de Energía (SENER), the Ministry of Energy, has taken many of these actions in the electrical sector by issuing agreements, which have been criticized for diminishing the development of renewable energies. In the petroleum products market, agreements and measures have attempted to tilt the market towards Pemex, including the following, each of which are discussed in greater detail below:

- Agreement to postpone compliance of the quality control requirements for ultra-low-sulfur diesel (ULSD) made by Pemex under the current fuel standard requirements found in NOM-016-CRE-2016
- Agreement to remove the asymmetric regulation (see examples below) in direct sales, as per agreement A/057/2018
- Preferential treatment to Pemex by regulatory bodies in order to align permit emission with the federal government's goal of strengthening the state-owned company

Ultra-Low Sulfur Diesel

ULSD has been required in Mexico since 2008. Pemex has complied with the requirements in major metropolitan areas and in the border region, but it has lacked the capacity to produce the remaining volume. Investment projects approved in 2009 were delayed due to lack of proper funding and were halted in 2016.

The Mexican Quality NOMS (official Mexican standards) have been updated accordingly. The regular diesel produced by Pemex has 500 parts per million (ppm) of sulfur while the ULSD has 15 ppm. This standard originally established that, as of December 31, 2018, only ULSD could be used within Mexican territory; however, in December 2018, the Comisión Reguladora de Energía (CRE), Energy Regulatory Commission, postponed the application of this measure until 2020 and then again until 2024.

In 2019, ULSD production only accounted for 19% of national diesel demand, generating an excess of regular diesel. CRE exempted compliance at Pemex storage and distribution terminals that currently provide ULSD in order to put the excess diesel inventory of 500 ppm produced by Pemex refineries on the market.

Asymmetric Regulation

The current regulatory framework determines how each step along the supply chain is organized in Mexico:

- **Fuels imports:** The import of petroleum products into Mexican territory according to the classification and codification released by SENER[2]
- **Petroleum refining:** A set of processes that separate crude oil into its useful components and adapt its characteristics to the needs of the market[3]
- **First-hand sales:** First sale, in Mexican territory, is done any productive enterprise of the state, or private company, to a third party or between them at the exit of the processing plant, pipelines, and the injection points of an imported product[4]
- **Transport:** Receiving, delivering, and driving hydrocarbons, petroleum products, and petrochemicals, from one place to another through pipelines or other means[5]
- **Storage:** Deposit and protection of hydrocarbons, petroleum products, and petrochemicals in confined tanks and facilities located on land, on water (ocean), or in the subsoil[6]
- **Distribution:** The logistics of distributing, including the transfer, petroleum products from one location to one or more previously assigned destinations, for its retail or final consumption[7]
- **Retail:** Sales directly to consumers of petroleum products, among other fuels, in facilities with a specific or multimodal purpose, including service, compression, and carburization stations, among others[8]

Under this organizational construct, those delivering to end-users and retailers are considered "distributors" while all other fuel movements are considered "transporters."

Within the Mexican fuels industry, asymmetric regulation refers to the set of rules that aims to level the playing field between private companies and Pemex. In 2018, CRE issued the agreement A/057/2018, which was recommended by the Comisión Federal de Competencia Económica (COFECE), or Federal Economic Competition Commission. In this

agreement, an asymmetric regulation was established to regulate the way that Pemex calculates the prices of its first-hand sales and grants discounts to distributors.

The aforementioned agreement intended to prevent the company from taking advantage of its dominant market power by granting preferential discounts to large suppliers for its first-hand sales and sales at its storage facilities. This ruling established market controls wherein at least 30% of the joint supply of gasoline and diesel would be provided by entities other than Pemex. The agreement was annulled in December 2019 without having accomplished this goal.

TABLE 1: PARTICIPATION IN THE SUPPLY OF GASOLINE AND DIESEL

YEAR	GASOLINE		DIESEL	
	PEMEX	PRIVATE COMPANIES	PEMEX	PRIVATE COMPANIES
2016	100%	0%	99.9%	0.1%
2017	99.8%	0.2%	95.3%	4.7%
2018	97.2%	2.8%	86.5%	13.5%
2019	90.7%	9.3%	78.8%	21.2%
2020	86.8%	13.2%	73.3%	26.7%

Source: HCX with information from the Ministry of Energy

The agreement A/057/2018 set limits to the discounts that Pemex could offer in the fuel market. It also established regulations for how the state-owned company could calculate the maximum price for first-hand sales and for sales at storage terminals and rules for discount granting. It also required the state-owned company to present a daily report of these prices to CRE as well as publish them on its website.

The annulment of this agreement follows the federal government's trend of strengthening Pemex and allows the company total freedom to set prices, discounts and granting procedures, contractual schemes, and other conditions using the company's own discretion and with less transparency. Considering the broad presence of the company in the production and importation of petroleum products, this action gives Pemex a great advantage over other importers in the sector.

Regulatory Bodies

Other actions, criticized by the opposition, have included integrating personnel with clear political leanings into the hydrocarbon sector's independent regulatory bodies. One example is the appointment of a director in the Agencia de Seguridad, Energía y Ambiente (Security, Energy and Environment Agency) who had previously been rejected five times by the Senate of the Republic.[9]

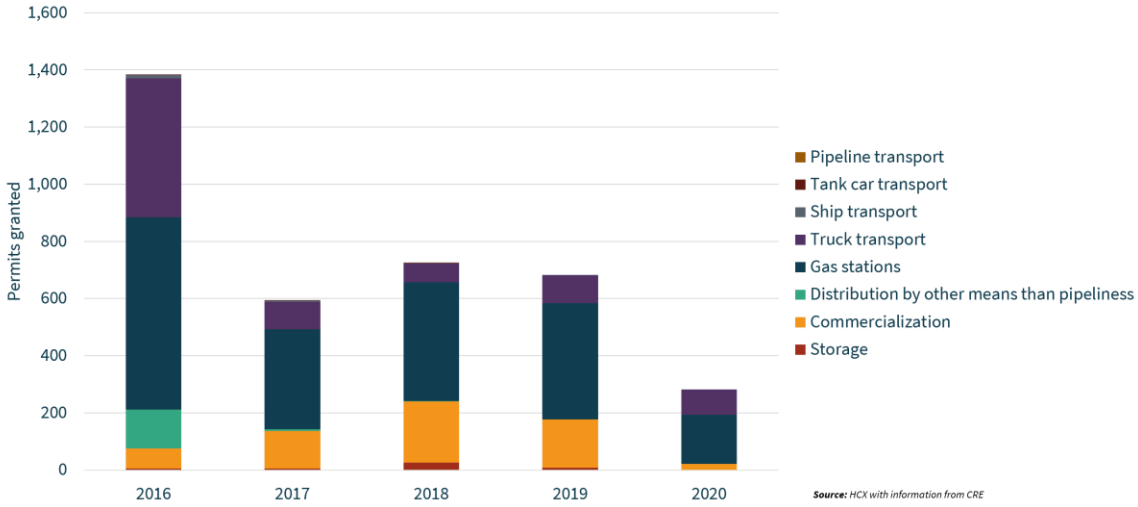
In another example of the Mexican government's effort to make changes in the regulatory bodies, on July 22, 2020, López Obrador sent a letter addressed to the personnel of Mexican regulatory bodies that established basic guidelines for a new energy policy. The provisions of the document include:

- eliminate grants of any type of subsidy to private companies;
- stop grants of permits to individuals;

- support the Comisión Federal de Electricidad (Federal Electricity Commission) and Pemex so that they do not lose market share; and
- increase oil production to 1.8 million barrels per day in 2020 and up to 2.2 million barrels per day in the next four years (the actual average oil production for 2020 was 1.66 million barrels per day, which represented a slight reduction compared to 2019).

According to the minutes from CRE sessions, by the end of 2020, only 171 permits were approved for new gas stations, a small number compared to the 407 authorized in 2019 and the 415 authorized in 2018. These authorizations have been reduced throughout the year, with only 32 gas stations authorized in the second quarter of 2020 and only six in the third quarter.

FIGURE 1: NUMBER AND TYPE OF PERMITS GRANTED



The reduction in permits issued is illustrated in Figure 1. The areas most affected are permits for new gas stations and commercialization activities. This downward trend in 2020 coincides with the COVID-19 pandemic and the resignation of commission senior officials.

Various market participants have spoken out against these measures, and even COFECE issued an opinion addressed to the CRE.[10] In this opinion, COFECE mentions that the resolution time for gas station permits has doubled and that, to date, there are more than 200 unresolved permit applications.

After the loss of quorum from commission official resignations, there has been an increase in the average wait time for resolving gas station permits. There is a significant difference in the resolution time for applications that plan to use a brand other than Pemex and for those with unspecified brands (19 days) (Table 2), which is diminishing market competition. An adequate and free market competition needs a dynamic and agile market.

TABLE 2: CRE RESOLUTION TIME

GAS STATION	BEFORE QUORUM LOSS (DAYS)	AFTER QUORUM LOSS (DAYS)	TIME INCREASE (DAYS)
Brands other than Pemex	20	84	64
Pemex	21	66	45
Unspecified brands	21	81	60

Source: COFECE

Petroleum Products Imports

Private companies have grown from fuel import activities. In recent months, however, import permits are being hampered, according to the opinion document issued by COFECE.

Import permits can be requested for one year. To obtain this permit, applicants must indicate how the imported fuels will be transported and the physical location of the storage facilities or equipment. There is also the possibility of requesting 20-year import permits, although the applicant must demonstrate they are developing new or expanding existing infrastructure. This causes a nonviable model where a lack of storage capacity (due to the inexistence of import permits to motivate investments) and lack of interest in requesting permits (due to the lack of infrastructure to support them) cripple progress. Thus, Pemex is the only company with the infrastructure to be able to carry out the request for the 20-year permits.

An agreement constraining petroleum product imports by private companies was published on December 26, 2020, in the Diario Oficial de la Federación, the official gazette of the federal government. Previously, two import permits were contemplated with a duration of one and 20 years. It allowed one-year permits to be extended for up to three occasions, and the 20-year permit for one occasion up to half the original term. In the new agreement published in December 2020, the 20-year permit is replaced by a five-year permit that can be extended for a single occasion and reduces the extensions for one-year permits from three to two occasions. Even with the existence of the 20-year modality of import permits, SENER had only granted one-year permits since November 2018.

Reducing the length of the import permits reduces the incentives for investment in transportation and storage infrastructure for petroleum products because traders are uncertain about their participation and long-term permanence in the market. Because traders need certainty in import volumes, availability, and long-term permanence in the market to be able to sign long-term contracts with storage and/or transport infrastructure developers, one-year and five-year import permits are hardly useful in anchoring this type of investment.

The new agreement also grants SENER discretion to adjust the volumes of import and export of petroleum products proposed in the permit. SENER may adjust the volume to the one it considers adequate without specifying the criteria that caused the adjustment. Through this attribution, SENER is empowered to control the available supply of petroleum products. It also affects the decisions of market participants to import what they need according to their business plans.

Legal changes made by the Mexican government are diminishing the energy reform and benefiting Pemex over private participants while creating an environment of uncertainty that affects the national and international investment. These measures have not gone unnoticed and have had various consequences, such as:

- reducing Pemex's investment ranks and of Mexico's sovereign rating by ratings such as Fitch, Moody's, and S&P Global Ratings;
- judicial action by private companies in Mexican courts; and
- international criticism for hindering clean energy and discouraging investment.

López Obrador's position was not to make any substantial changes to the regulatory framework in the first three years of his government, and his actions have been only legally binding agreements issued by regulatory bodies. However, the legal actions taken by private companies have been endorsed by various judges, who have suspended the government measures for being unconstitutional.

These rulings are a setback in the federal government's political agenda, so as per the president, the option of a constitutional reform after the 2021 elections is not eliminated. With this new energy reform, the government would seek to change the energy regulatory framework established in 2013 to grant a greater privilege to state-owned companies and achieve a strengthening of Pemex.

To carry out a constitutional reform, the two Congressional chambers must approve the reform by a two-thirds vote and the reform must be approved by an absolute majority in the state legislatures. This year, the lower house of Congress will face reelection, where the current president's party has a majority, so any scenario will depend on the results of this election. If the party loses its majority, the government will have more difficulty reverting the status quo that was established in 2013.

The U.S.–Mexico–Canada Agreement and Investment Protection

All legal claims recently made against the Mexican government claiming unfair competition have resulted from the agreements issued by some of its regulatory bodies, and the national courts have suspended most of these agreements because the 28th article of the Mexican Constitution protects and promotes fair competition. However, there are instruments of protection beyond national courts. Mexico has signed trade agreements such as the U.S.–Mexico–Canada Agreement (USMCA) that have measures to protect foreign investments.

Chapter 8 of the USMCA establishes Mexico's ownership over all its hydrocarbons in the subsoil within its national territory. Likewise, this chapter reiterates the Mexican government's right to reform its constitution and its domestic legislation. This may look like there is no protection for foreign investors in the energy sector, although these investments are protected by Chapters 14 and 22, which refer to investments and state-owned enterprises, respectively.

Article 32.11 of the USMCA establishes that, with respect to the obligations in investment, cross-border trade in services, and state-owned enterprises and designated monopolies, Mexico reserves the right to adopt or maintain any measure as long as these measures are no more restrictive than parallel obligations in other trade and investment agreements. This is important because the energy reforms incorporated into the 2018 Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) agreement are for all activities along the petroleum value chain.

In light of this, Mexico could not revert its energy reform without violating its obligations with the USMCA and the CPTPP. In fact, many energy consultants foresee an avalanche of legal action to protect the above-mentioned international agreements, as the actions of the Mexican government continually threaten investments from U.S. companies. Last year, six U.S. senators and 37 U.S. members of Congress sent a letter to the now former President Donald Trump claiming that recent actions taken in Mexican energy policy undermine the spirit of the USMCA trade agreement.

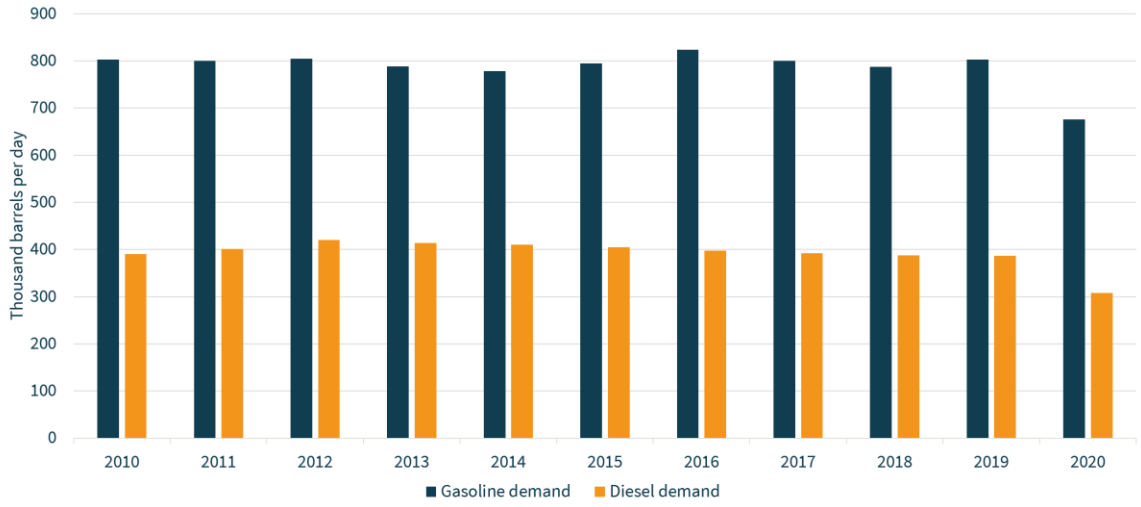
Since his election campaign, President Joe Biden has maintained an environmental agenda with clear support for renewable energy, reflected in the reintegration of the U.S. into the Paris Agreement. The Mexican government's current support for state companies represents a threat to foreign investment in the country, which could generate friction with the new U.S. administration. However, it is currently unclear what the U.S. government's response will be to actions that may affect U.S. investments of any kind in Mexico.

FUEL DEMAND EVOLUTION AND FORECAST

Gasoline and Diesel Market

The demand for fuel in Mexico has remained relatively constant in recent years despite the low production in Mexican refineries, a situation that is offset by the increase in fuel importation by private companies and Pemex. The stagnated increase in demand is caused by the increase in fuel prices due to the relaxation of price controls and a decrease in economic activity observed in the last 10 years.

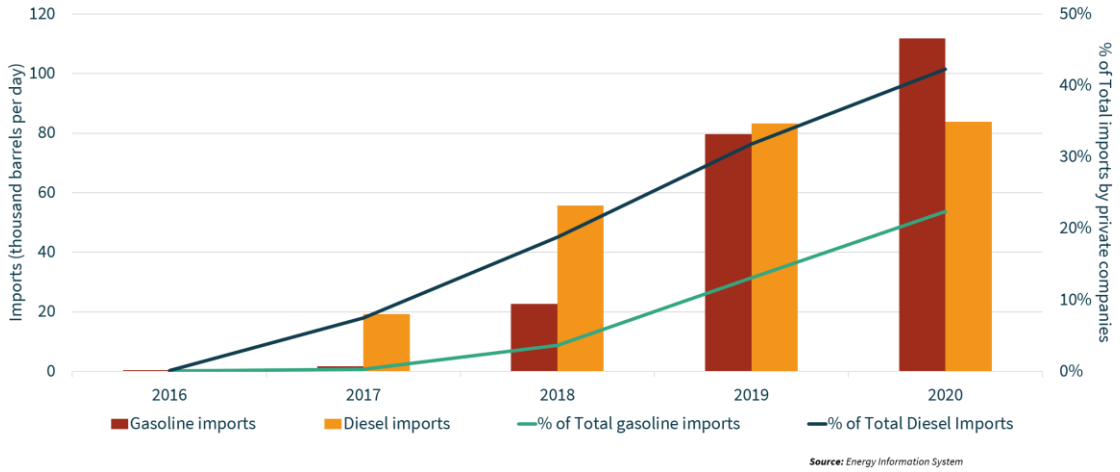
FIGURE 2: EVOLUTION OF GASOLINE AND DIESEL DEMAND



Gasoline consumption increased 1.92% from 2018 to 2019 while diesel consumption decreased 0.17% for the same period. For 2020, the consumption had been expected to remain stable, however, by the end of the year due to the COVID-19 pandemic, the consumption for both fuels decreased — gasoline demand decreased 15.74% while diesel decreased 20.41% (Figure 2).

Private company fuel imports are increasing for both gasoline and diesel, and this situation has been growing since 2016 with the opening of the fuel market to private companies, despite the challenges with permits.

FIGURE 3: PRIVATE COMPANY GASOLINE AND DIESEL IMPORTS



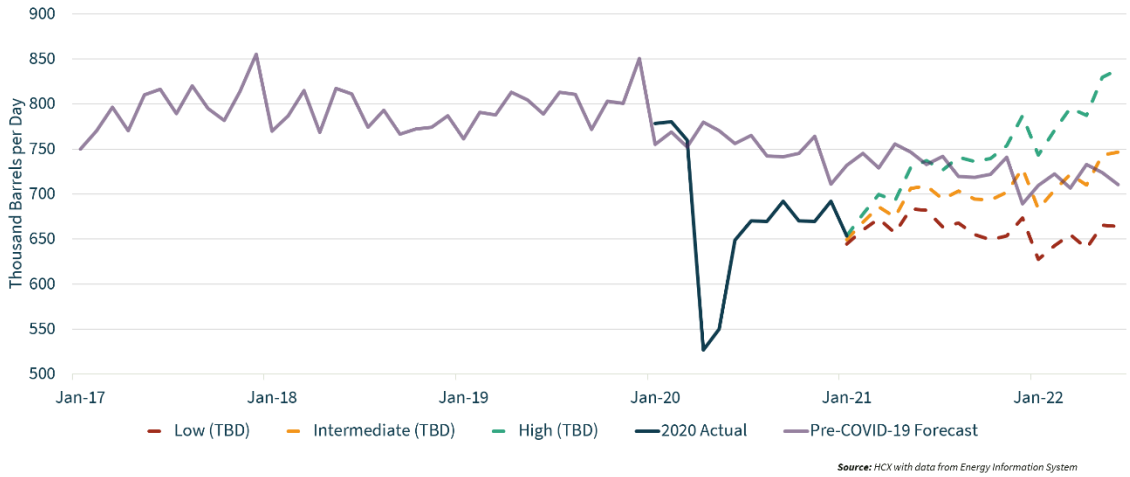
The highest growth has been in diesel, which reached 31% of total imports by private companies at the end of 2019 and averaged 42.28% in 2020 (Figure 3). For gasoline, this situation has been less pronounced, although more and more private companies seek to import their gasoline to sell in Mexico. On average in 2020, imports by private companies represented 22.36% of total importation.

In Mexico, gasoline is sold in two grades: Magna 87 AKI and Premium 93 AKI. According to data from the Sistema de Información Energética (Energy Information System), gasoline represents 53% of the demand for petroleum products in the country, of which most of the gasoline sold is the Magna type. Magna accounted for 84.6% of the market in 2018, 84.2% in 2019, and only 78.9% by 2020. The decrease in the Magna gasoline share in 2020 can be explained by a reduction of fuel consumption units mainly due to the pandemic.

Forecast

Due to the COVID-19 pandemic, the demand for gasoline and diesel plummeted as of March 2020 when social distancing measures were implemented. As time went by, a percentage of the population resumed activities, and a recovery in the demand for gasoline was observed in June. This recovery has been maintained in small but constant increments.

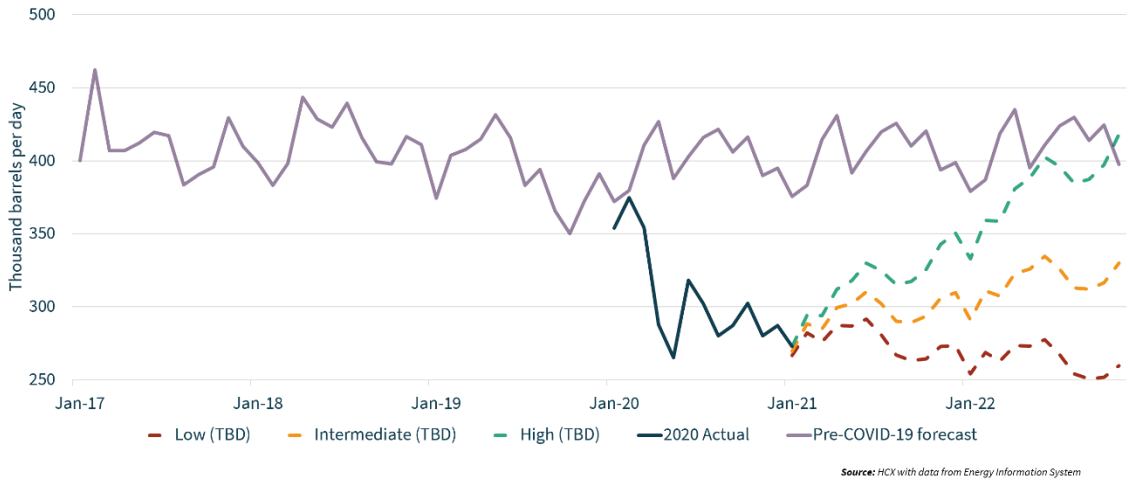
FIGURE 4: GASOLINE DEMAND FORECAST



As the pandemic continues, activities are expected to resume little by little, with possible quarantines from upturns in COVID-19 cases, which is why the demand for gasoline is expected to reach the previous forecast levels in early 2022, as the mobility in Mexico has not been as affected by quarantine as in other countries. The drop in consumption is more pronounced in diesel. Faced with the pandemic, the industrial sector's slower recovery is due to low economic activity, which explains the lack of recovery in diesel demand.

However, it is expected that, with the advance of the pandemic and the progressive return to activities, the sector will reactivate and there will be an increase in the demand for diesel. The recovery in diesel demand, which depends on the country's progress in vaccination against COVID-19 and the economic reactivation, could occur by the end of 2022 and continue along the pre-pandemic trend.

FIGURE 5: DIESEL DEMAND FORECAST



FUEL SUPPLY

Refining

Mexico has six refineries distributed throughout its territory that process national and imported crude oil; the gasoline and diesel produced by Mexican refineries supply a part of the demand for fuels while the rest is imported from abroad.

The total capacity (Table 3) of the Sistema Nacional de Refinación (SNR), or National Refining System, is 1.6 million barrels per day (bpd); however, this capacity has been underutilized in recent years due to outdated refineries and a lack of investment. In 2020, the average percentage of use was only 37% of its 1.6 million bpd. And in terms of gasoline, national production only supplied 25% of demand in 2018 and 34% until August 2020.

TABLE 3: REFINERY CAPACITY VS USE

REFINERY	CAPACITY (THOUSAND BARRELS/DAY)	2020 AVERAGE CAPACITY USED (THOUSAND BARRELS/DAY)	PERCENTAGE
Cadereyta	275	102.97	37.44%
Madero	177	81.48	46.03%
Minatitlan	285	91.58	32.13%
Salamanca	220	102.97	46.81%
Salina Cruz	330	97.56	29.56%
Tula	315	116.24	36.90%
Total	1,602	592.80	37.00%

Source: HCX with data from SIE

The current government, with its shift towards nationalist thinking, began to end Mexico's dependance on imported gasoline. To achieve this, the government needed to address the problems with the Pemex refineries, so it started a refinery rehabilitation plan in September 2019. The plan was meant to last two years and have an investment of 25 billion pesos (Table 4).

TABLE 4: REFINERIES MAINTENANCE BUDGET

REFINERY	BUDGET 2020 (PESOS)	BUDGET 2021 (PESOS)
Cadereyta	2,078,783,162	1,167,152,165
Madero	2,082,970,000	1,166,622,602
Minatitlan	2,053,010,002	1,166,731,930
Salamanca	2,089,236,837	1,166,166,667
Salina Cruz	2,082,999,999	1,166,659,467
Tula	2,083,000,000	1,166,667,169
Total	12,470,000,000	7,000,000,000

Source: HCX with data from SHCP

Despite the federal government's investment in the rehabilitation plan for the six refineries, SNR's production has not increased from its average of 592.8 thousand bpd, which is 37% of last year's production. The budget that was dedicated to refinery rehabilitation grew to 12.4 billion pesos in 2020, and in 2021 it is expected to be reduced to 7 billion pesos, as the current government has expressed that the maintenance work is going well and is almost complete.

The maintenance work started in 2019 when Mexican refineries were expected to process 1.1 million bpd of crude oil by the end of 2019; however, that goal was not reached and its deadline has been updated several times, first to May 2020 and later to the end of 2020.[11]

In addition to the refinery maintenance, since the beginning of the current government, the refining agenda has been mainly focused on a single project: the construction of a refinery in the port of Dos Bocas in the state of Tabasco in southeastern Mexico. This is an ambitious project since a new refinery has not been constructed in Mexican territory in the last 41 years.

The Dos Bocas refinery has been highly criticized and its viability questioned due to the efficiency of refineries in neighboring markets, the already ongoing energy transition, the environmental impact, and the underestimation of the cost and time required to build it. The government has announced that the refinery will be operational in June 2022. However, according to information from a Pemex project progress report after one year of construction, at the end of June 2020 the project was only 10.66% complete. The conclusion time is probably three years longer with a cost twice as high.

Transportation and Storage

The pipeline transportation infrastructure consists of 8,883 km with an operating capacity of 4,095 thousand bpd (Table 5).

TABLE 5: NATIONAL REFINING SYSTEM CAPACITY

SYSTEM	REGION	LENGTH (KM)	NOMINAL CAPACITY (BBL./D)	OPERATIONAL CAPACITY (BBL./D)
South-gulf-center-occident zone	West/central/gulf/ south/northeast	4,961	3,479,299	3,272,200
North zone	North/northeast	3,152	632,600	573,300
Guaymas	Northwest	249	55,000	53,000
Rosarito	Northwest	223	51,000	50,000
Topolobampo	Northwest	223	68,000	68,000
Progreso	Southeast	75	80,000	78,000
Total		8,883	4,365,800	4,094,500

Source: HCX with data from SIE

The pipeline infrastructure in Mexico consists of 85 pipelines distributed through the six systems (Table 5). In 2018, SENER reported the existence of four pipeline construction projects, but the last update on the projects was published in March 2019 (Table 6).

TABLE 6: NEW PIPELINE PROJECTS

COMPANY	PIPELINE	OPERATIONAL CAPACITY (THOUSAND BARRELS/DAY)
Howard Energy Partners	Texas—Nuevo Laredo	90
	Nuevo Laredo, Tamaulipas—Monterrey	
Invex	Tuxpan, Veracruz—Tula, Hidalgo	120
Transcanada, Sierra Oil & Gas, and TMM	Tuxpan, Veracruz—Central Mexico	90
Monterra Energy	Tuxpan, Veracruz—Tula, Hidalgo	100
Total		400

Source: HCX with data from SENER

The Invex pipeline obtained authorization from CRE through permit PL/21495/TRA/DUC/2018 to construct a pipeline to transport gasoline, diesel, and jet fuel. The pipeline will have a diameter of 24'' and a length of 270.014 km from a storage terminal in Tuxpan, Veracruz, to another located in Tula, Hidalgo. The total operating capacity of the system is 120 thousand bpd.

In addition to the pipelines reported in Table 6, on January 8, 2020, the company Terminal Río Bravo S.A. de C.V requested a permit for transportation by pipeline from Brownsville to Matamoros. This is related to a terminal project from the same company to receive gasoline and diesel from the U.S. On May 28, 2020, the permit was granted for two pipelines (6 and 8 ins.) with a design capacity of 65 thousand bpd operating capacity.

The largest petroleum storage infrastructure in the country belongs to Pemex, which has 73 storage and distribution terminals. These terminals together have an operating capacity of 11,971,619 barrels (Table 7).

TABLE 7: MEXICAN STORAGE CAPACITY BY REGION

REGION	NOMINAL CAPACITY (BARRELS)	OPERATIONAL CAPACITY (BARRELS)	NUMBER OF TANKS
Center	3,345,000	2,399,278	88
Gulf	1,168,500	298,676	67
Northeast	1,958,500	1,418,284	84
Northwest	4,023,000	2,917,095	110
North	1,270,000	952,432	43
West	3,350,000	2,398,206	104
South	84,500	566,272	52
Southeast	693,500	521,376	26
Total	16,613,000	11,971,619	572

Source: HCX with data from SIE

As of October 2018, 68 projects had been announced in 22 states across the country. In March 2019, this increased to 70 projects, which represents an estimated investment of $4.483 million (USD).

Mexican company IEnova has begun commercial operations at its new storage terminal at the port of Veracruz. This project was awarded to IEnova in 2017 and its construction began in 2018 with an investment of $300 million (USD). The project has a capacity of 2 million barrels to receive and store gasoline, diesel, jet fuel, and oxygenating additives.

The storage terminal is part of a logistics project in the gulf-center region of Mexico, which includes two land terminals in Puebla and Mexico City, connected by rail and tank trucks. The main client for the IEnova's terminal is the refining company Valero, who sent its first consignment of 330,000 bbl of regular and premium gasoline last December.

FUEL RETAIL INFRASTRUCTURE

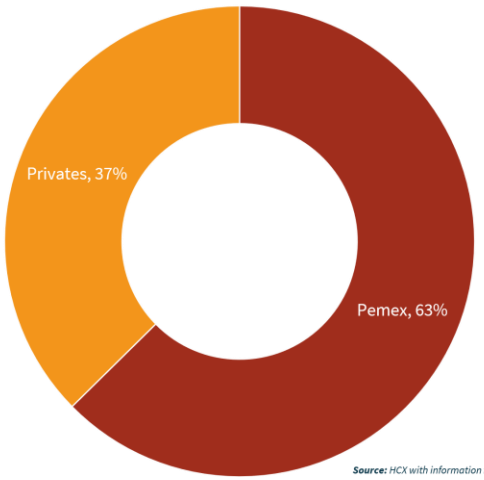
Selling at gas stations is the last step in the petroleum value chain. This has always involved private agents acting on behalf of the Pemex franchise. In 2016, service station sales were opened up to foreign private companies and brands other than Pemex, a situation that triggered greater competition, rebranding, and the development of storage and transport infrastructure driven by private companies.

Despite the opening of the market, the main participant remains Pemex, who is in charge of distributing fuel to most of the gas stations, including those advertising a different brand. By the end of 2017, the company reported that it supplied 454 service stations that advertised a different brand than Pemex.

While searching to maximize profits, gas stations looking for alternatives to Pemex for supply resorted to constructing infrastructure to import their own fuel to their service stations. To date, Exxon Mobil, Shell, Total, BP, Arco, and G500 are importing fuel by rail and sea to supply its points of sale, and others, such as Repsol and Hidrosina, have expressed their intention to start importing fuel in the short term.

As of June 2020, there were 12,701 gas stations in Mexico, of which 37% correspond to brands other than Pemex; this percentage represents 4,747 gas stations, of which, according to Pemex data, 2,698 gas stations are supplied by both Pemex and other suppliers.

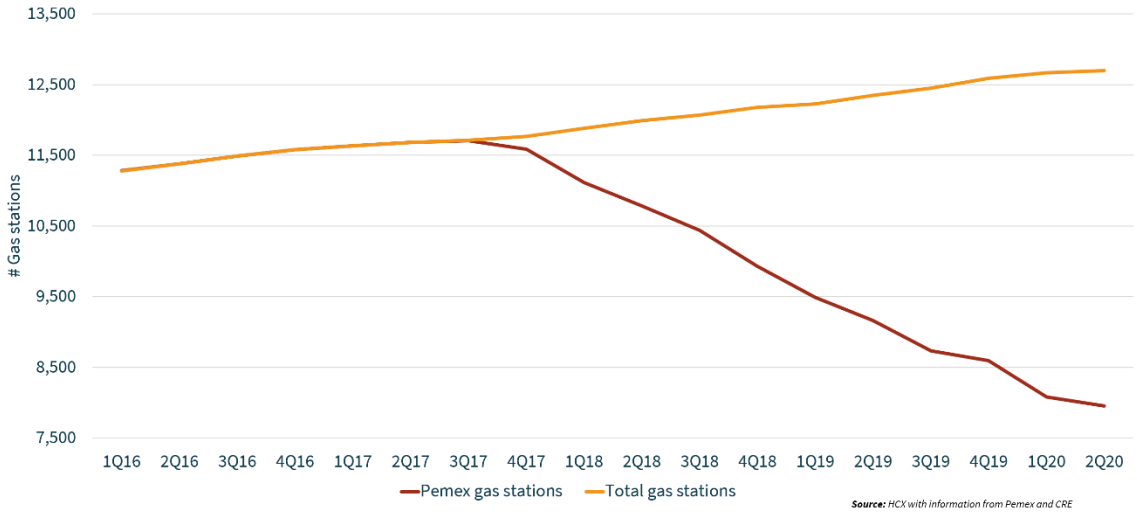
FIGURE 6: RETAIL STATION MARKET SHARE



At that time, only 7,954 gas stations operated under the Pemex brand, representing a 13.2% drop compared to the second quarter of 2019; previously, they'd also had a 15% drop between 2018 and 2019. This shows how the

rebranding process has accelerated (Figure 7). The number of gas stations in Mexico has grown in the last three years, although not as much as the decrease of Pemex gas stations, an effect of rebranding and a slow growth rate of new gas stations.

FIGURE 7: GAS STATION EVOLUTION



The market loss has taken its toll on Pemex, a company that was already hit by mismanagement and corruption in previous years. During the third quarter of last year, its internal sales fell 19.6% to 202.52 billion pesos, representing 57% of its total billing during the third quarter of the year.

The transition of the service station market has been mainly in the change of brand. Rebranding usually costs less than building a new service station, so to gain ground in the market, large companies choose to promote migration to their brand. Additionally, the change of brand represents an extra profit for the service station.

Even with the increase of private participants in the service station market, Mexico is still a market with high potential with a low density of gas stations. In 2018, the number of people per service station was 10,560; this indicator has evolved very little, reaching approximately 9,821 people per service station by 2020. A higher density of gas stations would translate into greater competition that would represent a better price for the consumer.

CONCLUSION

- The preferential treatment towards Pemex has persisted in the actions of the current federal government. This behavior communicates a message contrary to what is established in the Mexican Constitution. These measures have discouraged investment in Mexico and have paused the construction of new infrastructure for storage and transportation of petroleum products.

- An important mechanism for the market to grow and become more competitive is the issuance of permits to service stations for public sales. A current opportunity for improvement would be for CRE to reduce and equalize the approval time for permit applications.

- Even though the new government has been adamantly trying to foster a stronger Pemex, this hasn't actually happened. Pemex is still not producing enough fuel internally. The amount of imported fuel by private companies and gas stations from non-Pemex brands continues to grow in the country into an irreversible trend.

- Modifying the constitution to benefit Pemex would result in an avalanche of international lawsuits against Mexico for violating international agreements under the 2013 energy reform.

- Federal judges' suspension of measures taken by the federal government make clear their incompatibility with the constitution and open the door to possible energy reform that would give preferential treatment to Pemex. This action could reduce or eliminate private investment in Mexico. The results of the 2021 elections will be an important indicator of what may happen for the country's energy industry.

- The demand for gasoline and diesel is expected to recover in early or mid-2022 from the drop caused by the trends in mobility and social distancing during the COVID-19 pandemic and will continue with previous trends.

- As a result of the 2013 energy reform, private companies' participation in the fuel market has reached 13.2% for gasoline and 26.7% for diesel through imported gas station supply.

- The density of people per service station evolved from 10,560 people per station to 9,821. Despite the change, there is still a high opportunity in the gas station market in Mexico. Increasing the number of service stations would guarantee greater competition and would benefit the consumer.

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GLOSSARY

COFECE	Comisión Federal de Competencia Económica (Federal Commission of Economic Competition)
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CRE	Comisión Reguladora de Energía (Energy Regulatory Commission)
SHCP	Secretaría de Hacienda y Crédito Público (Ministry of Finance and Public Credit)
SNR	Sistema Nacional de Refinación (National Refining System)
tbd	thousand barrels per day
ULSD	ultra-low-sulfur diesel
USMCA	U.S.—Mexico—Canada Agreement

About the Fuels Institute

Founded by NACS in 2013, the Fuels Institute is a nonprofit tax-exempt social welfare organization under section 501(c)(4) of the Internal Revenue Code. We are dedicated to evaluating issues affecting the vehicles and fuels markets. We commission comprehensive, fact-based research projects that are designed to answer questions, not advocate a specific outcome. Our reports address the interests of industry stakeholders—from business owners making long-term investment decisions to policymakers considering legislation and regulations that affect these markets.

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HCX provides solutions for the oil, gas, and renewables value chain for both national and international companies looking to capitalize on the opportunities in the Mexican and North American energy sector. They operate a vast network of professionals and experienced consultants from the U.S. and Mexico.

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END NOTES

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