

**NAFTA Protects US National Security:
How to Increase US Influence over Russia and China in Mexico's Energy Market**

Summary: *Modernizing NAFTA in the Right Way for Energy*

If the US stays in NAFTA and modernizes NAFTA in the right way for energy, we will increase US jobs and enhance US national security by solidifying US access to Mexico's energy market over our adversaries China and Russia.

The right way to enhance US national security interests related to energy in NAFTA is to:

- (1) Bind Mexico in NAFTA to keep its energy market open to the US – Negotiate clear and binding commitments for a US energy presence in Mexico;
- (2) Make a modernized NAFTA permanent – Do not continue to negotiate a “sunset clause,” and
- (3) Strengthen NAFTA's investment protections and retain Investor-State Dispute Settlement (ISDS) – Do not continue to negotiate for “opt-in/opt-out” ISDS or other weakened investment provisions.

If the US stays in NAFTA and agrees these three provisions, the US would enhance US national security interests related to energy and Mexico:

- US companies could continue to gain even more of a presence in all segments of Mexico's oil and natural gas market, which is opening to foreign investors for the first time in over 70 years.
- US exports of natural gas and refined products to Mexico could continue to increase over time, gaining market share from Mexico's imports from the rest of the world or from Mexico's own sources in order to meet Mexico's growing demand for energy.
- As the world's largest producer of both oil and natural gas, the US requires global exports markets; significant US exports to Mexico could continue to support American manufacturing jobs at US refineries and American jobs tied to US production of oil and natural gas.

Alternatively, if the US withdraws from NAFTA or weakens NAFTA, China and Russia may increase their presence in Mexico's energy market, right on the US border. Instead of growing US energy jobs through increasing US exports of energy to Mexico and through increasing US energy investment in Mexico, a US withdrawal from NAFTA or a weaker new NAFTA may cause Mexico to turn away from the US toward China and Russia for its energy needs. Instead of remaining within the US energy sphere of influence, Mexico may be incentivized to go the way of Venezuela, which from 1999 to 2018 nationalized many US and US-allied energy assets, awarded project stakes to Russian and Chinese oil and natural gas companies over US companies, took cash-for-oil loans from Russia and China and traded equity of Citgo, a subsidiary of state-owned oil company Petróleos de Venezuela, S.A. (PdVSA), in exchange for additional loans from Russia.

Mexico Today: Enhancing US National Security through Access to Mexico’s Energy Market.

NAFTA provides several energy benefits to the US: energy security, US jobs, affordable energy and enhanced competitiveness of US companies to compete and win in the energy markets of Canada and Mexico. Mexico’s newly-opened energy market, in particular, offers the US the opportunity to enhance US national security. Mexico represents a critical export market for the US as the world’s largest producer of both oil and natural gas. Mexico is now the #1 export market for US pipeline natural gas, total refined products, finished motor gasoline, distillate fuel oil, rubber and plastics.¹ In 2015², the US exported 21% of its total global exports of refined products and natural gas to Mexico.³ In 2015, the US exported 2.89 billion cubic feet per day (BCFD) of natural gas to Mexico, which equates to 4% of total U.S. dry gas production of 74.15 BCFD in 2015.⁴ US pipeline capacity for natural gas exports to Mexico has rapidly expanded in the past few years and currently stands at 7.3 BCFD and is expected to nearly double in the next three years.⁵ Mexico is also a new market for US LNG exports, with 429 mcf/d of natural gas shipped from the United States from February 2016 through October 2017 (the latest date for which data are available).⁶

Today, US supplies of refined products and natural gas to Mexico meet a significant percentage of Mexico’s total demand. In 2015, US exports to Mexico supplied the country with 36% of Mexico’s total consumption of refined products and natural gas, with Mexico meeting the rest of its demand by 12% from imports from the rest of the world and by 53% from domestic sources.⁷ Since 2000, Mexico’s net imports of gasoline and diesel have tripled, most of which are supplied by refineries in the US.⁸ The six refineries in Mexico, all owned and operated by PEMEX, were built before 1980. They cannot meet Mexico’s increases in domestic demand for fuels, and some of their existing capacity is not configured to process the increasingly heavy crude that Mexico produces.⁹ Mexico therefore exports crude oil to refineries in the US, which manufacture refined products that are subsequently *exported from the US back to Mexico*. The US Energy Information Administration (EIA) states that “while Mexico hopes to reduce its imports of refined products by improving domestic refining capacity, analysts contend that

¹ Source: US Energy Information Administration (EIA). *Refined Products Exports by Destination; US Natural Gas Exports and Re-Exports by Country*.

² Note: 2015 data is used throughout this paper in order to maintain consistency across all statistics. Although in some instances 2016 or 2017 data are available, for other statistics the 2015 data are the latest available.

³ Sources: EIA. 2015. *Petroleum & Other Liquids: Exports by Destination*; EIA. 2015. *International Energy Statistics: Exports of Dry Natural Gas*.

⁴ Source: Ibid.

⁵ Source: US Energy Information Administration (EIA). 1 December 2016. *New U.S. border-crossing pipelines bring shale gas to more regions in Mexico*.

⁶ Source: US Department of Energy. October 2016. *LNG Monthly (YTD 2016)*.

⁷ Sources: Government of Mexico Secretaría de Economía. *Estadística de Comercio Exterior de SE*; EIA. 2015. *Petroleum & Other Liquids: Exports by Destination*; EIA. 2015. *International Energy Statistics: Exports of Dry Natural Gas*.

⁸ Source: International Energy Agency (IEA). 2016. *Mexico Energy Outlook*, p. 23.

⁹ Source: *ibid*.

Mexico does not have a natural competitive advantage in refining, given the country's close proximity to a sophisticated US refining center."¹⁰

And in 2013, to address declining production and the need for competition and foreign investment to modernize its energy sector, Mexico enacted historic constitutional reforms to end PEMEX's monopoly and open Mexico's market to foreign investment. US strength in oil and natural gas has positioned US companies to meet Mexico's needs for technical expertise and capital to modernize their energy sector. In 2015, US companies' FDI in Mexico totaled \$420M for oil and gas extraction, and \$1.96B for support activities for oil and gas extraction.¹¹

Since 2015, in the midstream and downstream segment of Mexico's energy market, US and US-allied oil and natural gas companies have made aggressive investments in Mexico's fast-opening access to pipeline and storage infrastructure and retail and wholesale fuel sales and supply.¹² In a 2017 auction, US company Andeavor (formerly Tesoro) obtained exclusive access to PEMEX pipeline and fuel storage capacity in northwest Mexico.¹³ In March 2017, UK-based BP opened its first gas station in Mexico, in the Mexico City metro area, the first of a planned five-year investment that will open around 1500 such stations across the country.¹⁴ In May 2017 ExxonMobil announced it would make a \$300M investment in service stations in the coming decade in Mexico.¹⁵ In August 2017 Chevron announced it would open its first Chevron-branded gas station in Mexico, with subsequent ones planned across four Mexican states.¹⁶ And in September 2017, The Netherlands-based Shell opened its first service station in Mexico and announced a potential \$1B in Mexico over the next ten years.¹⁷

Since 2015 through January 2018, in the upstream (or exploration and production) segment of its energy market, Mexico has auctioned oil and natural gas blocks to domestic and foreign investors, with companies from US winning the second-most blocks awarded to foreign investors and China and Russia combined winning the third-most blocks awarded to foreign investors: US companies won 15% of the 47 blocks awarded to foreign investors, while companies from Russia and China combined won 13% of these blocks.¹⁸ Companies from The Netherlands won the most blocks awarded to foreign investors: 19% of these blocks.

¹⁰ Source: US Energy Information Administration (EIA). 2017. [Mexico Overview](#).

¹¹ Source: US Bureau of Economic Analysis (BEA). US Direct Investment Position Abroad on a Historical-Cost Basis: Industry Detail for Selected Countries, 2015.

¹² Source: BCG. 5 July 2017. [Mexico's fast transition to an open fuels market](#).

¹³ Source: mysanantonio.com. 9 May 2017. ["San Antonio-based Tesoro wins first Pemex pipeline and storage contract."](#)

¹⁴ Source: BP. 10 March 2017. [BP unveils first retail fuels site in Mexico](#); and BP. [Nuestra primer estación de servicio BP ya está lista](#).

¹⁵ Source: Reuters. 17 May 2017. [Exxon says to open gas stations in Mexico, invest \\$300 million](#).

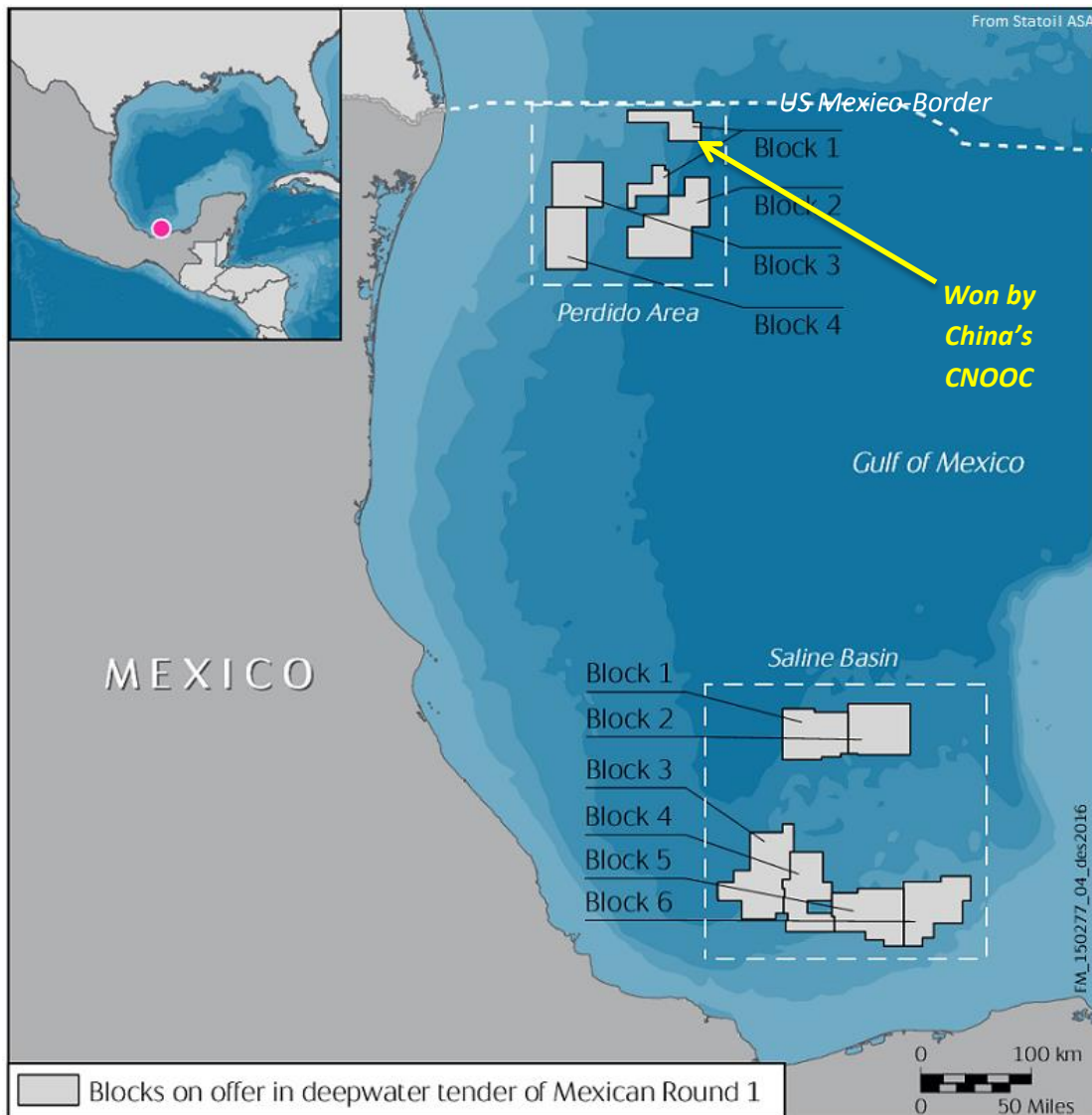
¹⁶ Source: Chevron. 17 August 2017. [Chevron Brand Coming to Mexico](#).

¹⁷ Source: Shell. 5 September 2017. [Shell opens first service station in major Mexican expansion plan](#).

¹⁸ Sources: Oil & Gas Journal. 16 July 2015. [Mexican round nets two successful bids](#); Oil & Gas Journal. 30 September 2015. [Three blocks awarded in Mexico's Round One second tender](#); oilandgasmexico.com. 17 December 2015. [Infographic: Have a Look at the Results of R1-L3](#); Oil & Gas Journal. 16 December 2015. [Local firms dominate Mexico's onshore third-phase Round 1](#); Oil & Gas Journal. 5 December 2016. [BHP, CNOOC](#),

In Mexico's December 2016 bid round of Perdido Area deepwater blocks, which were among the most sought-after by foreign investors, US companies were successful in capturing five of the eight blocks awarded. One block was won by a venture led by the Malaysian state-owned oil company Petronas, and the other two blocks were won by CNOOC, the Chinese state-owned oil company. One of the blocks won by CNOOC is Block 1 in the Perdido area, part of which is right on the US-Mexico border in the Gulf of Mexico.¹⁹

Figure 1. Oil and Natural Gas Blocks in Deepwater Tender of Mexican Round 1



[European majors among winners for Mexican deepwater blocks](#); The Oil & Gas Year. 13 July 2017. [Mexico auctions onshore blocks](#).

¹⁹ Source: Oil & Gas Journal. 5 December 2016. [BHP, CNOOC, European majors among winners for Mexican deepwater blocks](#).

In Mexico's January 2018 bid round of offshore blocks, which were among the most sought-after by foreign investors, a US company was successful in capturing one of the sixteen blocks awarded, with a Dutch company capturing eight blocks, the most by any one company/consortium, with the remainder of the blocks awarded to foreign companies from Italy (one block), Malaysia (3 blocks) and Spain (3 blocks).²⁰ In this January 2018 bid round, no Russian or Chinese companies were successful in winning any blocks, but Chinese companies participating in consortia finished second in the bidding for three of the Perdido Area deepwater blocks.²¹

Venezuela 2005-2018: Cautionary Tale of United States Access Lost to Russia and China

However, if the US withdraws from NAFTA – or weakens NAFTA with a sunset clause or by excluding investment protections and ISDS – US access to Mexico's energy market could be compromised, and Mexico may view the US as an unreliable trade partner and ally. Mexico's trajectory of opening its energy market to the US may begin to reverse and could replicate events similar to those that have occurred in Venezuela from 2005-2018.

Before Hugo Chavez came to power in Venezuela in 1999 and nationalized oil and natural gas assets beginning in 2005, the US enjoyed the national security benefits of access to investments in Venezuela's oil and natural gas market and the supply of Venezuelan crude oil. Since 2005, US access and influence in Venezuela's energy market has been lost to Russia and China. In 2005, US companies were the largest foreign investors in 53% of the 19 major oil and natural gas projects in Venezuela, compared to companies from China or Russia holding the largest foreign stake in 16% of those projects.²² Between 2005 and 2018, Venezuela nationalized and expropriated assets of several US companies that held stakes in these major projects, including the expropriation of ExxonMobil from the Cerro Negro (later renamed Petromonagas) and La Ceiba projects; ConocoPhillips from the Petrozuata (later known as Petrozoategui) and the Golfo de Paria projects (later known as Petrosucre and Petrolera Paria); and ConocoPhillips and Chevron from the Hamaca project (later known as Petropiar). Venezuela replaced ExxonMobil with Russia's Rosneft in the Cerro Negro/Petromonagas project and replaced ConocoPhillips with China's Sinopec in the Golfo de Paria/Petrolera Paria project.

²⁰ Sources: Reuters. 31 January 2018. [Factbox: Companies who bid or won in Mexico's deep water oil sale](#); Natural Gas Intel. 31 January 2018. [Shell Hits the Ball Out of the Park in Mexico's Key Round 2.4 Upstream Auction](#).

²¹ Source: drillinginfo. 5 February 2018. [Mexico Deepwater Bid Round 2.4 Draws in Big Names](#).

²² Sources: BBC. 18 December 2017. "Russia's Rosneft wins gas licences in Venezuela;" Chevron. [Venezuela](#); Eni. [Eni's Activities in Venezuela](#); EIA. 2005. [Venezuela Country Analysis Brief 2005](#); EIA. 2012. [Venezuela Country Analysis Brief 2012](#); EIA. 2014. [Venezuela Country Analysis Brief 2014](#); EIA. 2015. [Venezuela Country Analysis Brief 2015](#); PetroChina Company Limited. 2005. [Securities and Exchange Commission Form 6-K](#); Repsol. [Repsol Worldwide: Venezuela](#); Shell. [La Historia de Shell en Venezuela](#); Statoil. [Venezuela](#); Total. [Total in Venezuela](#); UNCTAD. Investment Policy Hub: [Investment Dispute Settlement: 2007 ConocoPhillips v. Venezuela](#); UNCTAD. Investment Policy Hub [Investment Dispute Settlement: 2007 Mobil and others v. Venezuela](#).

By 2018, companies from China or Russia were the largest foreign investors in 30% of the 40 major oil and natural gas projects in Venezuela, compared to US companies holding the largest foreign stake in 13% of those projects.²³

From 2005 to 2018, Venezuela's financial position turned from bad to worse, with burgeoning debt problems and a currency foreign exchange rate that on an official basis depreciated by about 80%, spurring high inflation and a death spiral for investment and the economy. Russia and China were willing partners for Venezuela and provided for financial support in exchange for debt notes, resource access and promises for future production.

In 2005, US private sector companies were financing Venezuelan oil and natural gas fields in which they held stakes, and Venezuela received negligible financial support from Russia and China. In 2005, Venezuela exported little to China and Russia, with China as Venezuela's #17 export partner with \$0.30B in trade and Russia as a negligible export partner.²⁴ (Note that most of Venezuela's exports represent trade in oil.²⁵)

In contrast, by 2017, Venezuela's debt liabilities totaled \$196B or more, with estimates that China held outstanding claims of \$28.1B and that Russia held outstanding claims of \$9.1B.²⁶ China's state banks loaned \$60 billion to Venezuela between 2007 and 2016,²⁷ the majority of which Venezuela also pays back with oil shipments, estimated to total 579 K b/d in 2015.²⁸ By 2017, China became Venezuela's #3 export partner with \$9.0B in trade.²⁹

Since 2008, Russia's Rosneft has provided \$17 billion dollars to PdVSA, including \$6B during the current liquidity crisis,³⁰ which Venezuela typically repays in oil that Rosneft resells, estimated to total 225K b/d in 2017 (and that Rosneft trades in the global oil markets).³¹ In 2016, Rosneft made \$1.5B in loans for a 49.9 percent stake in PdVSA subsidiary Citgo (which operates refineries and gas stations in the US)³², with reports that a pending deal would allow Rosneft to swap its collateral in PdVSA's Citgo for stakes in three additional PdVSA oil fields, two natural gas fields and a fuel supply contract.³³

²³ Sources: Ibid (all sources from footnote 22).

²⁴ Source: IMF. 2005-2016. [Direction of Trade Statistics](#).

²⁵ Source: The Observatory of Economic Complexity. 2015. [Venezuela Country Profile – 2015](#).

²⁶ Source: 19 September 2017. Walker, M. & Cooper, R.J. [Venezuela's Restructuring: A Realistic Framework](#).

²⁷ Source: 7 December 2017. CNNMoney. ["China sues Venezuela's oil company over unpaid bills."](#)

²⁸ Source: 30 September 2016. CNNMoney. ["China is cutting off case to Venezuela."](#)

²⁹ Source: IMF. 2005-2016. [Direction of Trade Statistics](#).

³⁰ Source: 14 September 2017. Business Insider. ["Russia and China are propping up Maduro's regime in Venezuela."](#)

³¹ Source: 11 August 2017. Reuters. ["Special Report: Vladimir's Venezuela - Leveraging loans to Caracas, Moscow snaps up oil assets."](#)

³² Source: 14 September 2017. Business Insider. ["Russia and China are propping up Maduro's regime in Venezuela."](#)

³³ Source: 11 August 2017. Reuters. ["Special Report: Vladimir's Venezuela - Leveraging loans to Caracas, Moscow snaps up oil assets."](#)

Table 1 below summarizes, from 2005 to 2018, the extent of lost US influence to Russia and China in Venezuela’s oil and natural gas market.

Table 1. Lost US Access to Venezuela’s Oil and Natural Gas Market, 2005 to 2018³⁴

	2005	2018
Foreign Investor Stakes in Oil & Natural Gas Projects	<ul style="list-style-type: none"> • US: <ul style="list-style-type: none"> ○ 53% of 19 largest projects have US company with largest foreign investor stake ○ #1 foreign investor in oil and natural gas, by project stake • China & Russia: <ul style="list-style-type: none"> ○ 16% of 19 largest projects have Chinese or Russian company with largest foreign investor stake ○ China and Russia combined = #2 (tie with Brazil) foreign investor in oil and natural gas, by project stake 	<ul style="list-style-type: none"> • US: <ul style="list-style-type: none"> ○ 13% of 19 largest projects have US company with largest foreign investor stake ○ #3 foreign investor in oil and natural gas, by project stake (Italy = #2) • China and Russia: <ul style="list-style-type: none"> ○ 30% of 40 largest projects have Chinese or Russian company with largest foreign investor stake ○ China and Russia combined = #1 foreign investor in oil and natural gas, by project stake
Financial Support to Venezuela	<ul style="list-style-type: none"> • US: <ul style="list-style-type: none"> ○ Private sector companies financing 10 of Venezuela’s 19 major oil and natural gas projects • China and Russia: <ul style="list-style-type: none"> ○ Negligible financial support from Russia or China ○ Venezuela Exports (primarily oil) – China + #17 export partner, \$0.30B; Russia: Negligible 	<ul style="list-style-type: none"> • US: <ul style="list-style-type: none"> ○ Private sector companies financing 5 of Venezuela’s 40 major oil and natural gas projects • China: <ul style="list-style-type: none"> ○ Venezuela’s #3 export partner -- \$9.B ○ \$60B in loans, \$28.1B outstanding <i>China takes 579K b/d oil as payment</i> <i>China now operates Isla Refinery in Curacao; Venezuela’s PdVSA operated for decades previously”</i> • Russia: <ul style="list-style-type: none"> ○ \$17B in loans, \$9.1 outstanding <i>Rosneft resells 225K b/d oil as payment and trades it globally</i> <i>Rosneft has 49.9% stake in Venezuela-owned US refiner Citgo as collateral”</i>

³⁴ Sources: see footnotes #20-31.

Mexico in 2030: A Potential Scenario of United States Access Lost to Russia and China

Today, Mexico appears to be on a different path than Venezuela, but Mexico faces macroeconomic and financial challenges – like pre-Chavez Venezuela – that could become key factors if its relationship with the US deteriorates. Mexico's debt-to-GDP ratio increased by 25% to 58.4 in 2016 from 46.4 in 2013,³⁵ Over this same period, the Mexican peso lost nearly one-third of its exchange value versus the U.S. dollar³⁶ and likely will continue to lose value if the US were to withdraw from NAFTA or weaken NAFTA's durability and its protections for US investors. Mexico currently is opening its oil and natural gas market to the US, but with an adverse NAFTA outcome the US may alienate Mexico and incentivize it to look even more to Russia and China as partners to develop its oil and natural gas resources and modernize its petroleum refining capacity. Specifically, China's and Russia's access to Mexico's oil and natural gas market could increase with a US withdrawal from NAFTA or with a weakened NAFTA with a sunset clause, weaker investment protections and no investor-state dispute settlement (ISDS).

China and Russia could welcome greater uncertainty and risk for US and US-allied energy investors in Mexico and by 2030 could displace US energy interests in Mexico, much as they have done in Venezuela, through the following:

1. ***By 2030, China and Russia and their state-owned oil and natural gas companies could be in a strong position to win the most-sought blocks and projects that Mexico offers to foreign investors.*** Chinese and Russian investors combined could win more oil and natural gas blocks available to foreign investors. This could occur through Chinese and Russian firms offering more competitive terms than US firms, as US firms reduce their participation to reflect lesser or no investment protections and ISDS, compared with what are currently provided by NAFTA. This could also occur through Mexico changing the way it offers stakes to foreign investors, switching from a transparent process based on competitive commercial bids to closed-door bilateral negotiations that could favor Russia and Chinese oil and natural gas companies.
2. ***Between now and 2030, Mexico could invite China to upgrade Mexico's six under-performing refineries and to construct a new refinery to displace US fuel exports, in return for exporting more crude oil to China.*** Mexico's current six state-owned refineries operate at 66% of their design, or nameplate, capacity.³⁷ Mexico could agree to Chinese investment to upgrade the capacity in its six existing refineries to full capacity,³⁸ and Mexico could also agree to Chinese investment to build a new refinery. From Mexico's perspective, the advantage of looking to Chinese investment in its refineries would be to reduce its imports of refined products from the US, which comprised 34% of its 2015 consumption of the same. From China's perspective, investing in Mexico's refining sector would be in line with multiple

³⁵ Source: IMF, [Mexico 2017 Article IV Consultation](#), November 2017.

³⁶ Source: [US Federal Reserve Bank](#), January 2018.

³⁷ Source: IEA. 2017. [Energy Policies Beyond IEA Countries: Mexico 2017](#).

³⁸ Full refinery capacity is defined as 89.6%, which is the 2012-2016 average for refineries in the US. Source: EIA. 2016. [Refinery Utilization and Capacity](#).

investments it has pursued in refineries globally since 2000.³⁹ In 2015, Mexico produced enough crude oil to meet its needs, but exported about half of its production and imported the equivalent of 50% of its crude oil exports in the form of refined products.⁴⁰ By 2030, with expanded production of crude oil and expanded refinery capacity, Mexico could decrease its exports of crude oil to the US, decrease its imports of refined products from the US and increase its exports of crude oil to China.

3. **US exports of natural gas and refined products to Mexico could diminish, bottling up manufacturing at US refineries and US production of crude oil.** With upgrades to its own refineries, Mexico would be able to refine more of its own crude oil into refined products that it would consume – reducing its dependence on refined products from the US. By 2030, with increased upstream investment from China and Russia and a greater desire to develop its domestic crude oil and natural gas production and refining capacity, Mexico could reduce its imports of natural gas and refined products from the US to 13% of Mexico’s total consumption, down from 36% of its consumption in 2015.

Table 2 shows the details of how Mexico’s oil and natural gas balance and trade could change from 2015 to a potential 2030 scenario.

³⁹ Since 2000 Chinese state-owned companies Sinopec, CNPC and Guangdong Zhenrong Energy have invested to build new refineries in Algeria, Iran, Kuwait, Myanmar, Niger and Sudan (Sources: Africa Oil + Gas Report. 17 December 2012. [Chinese Refineries, African Locations](#); Sinopec. 2015. [Group Annual Report](#); Reuters. 19 September 2015. [Curacao inks deal with China firm to run Isla Refinery](#); Financial Tribune. 9 December 2016. [Sinopec Starts Abadan Refinery Rehab Project](#)). In 2016, China’s Guangdong Zhenrong Energy took over operations from Venezuela’s PdVSA of a refinery in Curacao, investing \$10B to upgrade the facility (Source: Reuters. 19 September 2015. [Curacao inks deal with China firm to run Isla Refinery](#)). In 2017, China’s CNPC entered into talks with Brazil to build a new refinery in Brazil (Source: Reuters. 31 October 2017. [Petrobras in talks with China’s CNPC to build refinery](#)). In 2017, China’s Sinopec purchased a refinery in South Africa and refined products interests across South Africa and Botswana (Sources: African Business. 26 April 2017. [China seeks more African oil downstream operations](#); oilprice.com. 22 June 2017. [China Aims for Market Share in African Refining Sector](#)).

⁴⁰ Source: IEA. 2015. [Mexico Balance](#).

Table 2. Key Dimensions of Mexico’s Energy Balance, 2015 vs. Potential 2030 Scenario⁴¹

Dimension of Mexico’s Energy Balance	2015	Potential 2030 Scenario
Refinery Input Capacity	1062 Mbbbl/d ⁴² <ul style="list-style-type: none"> 6 refineries operating at 66% capacity 	1688 Mbbbl/d <ul style="list-style-type: none"> ➤ 6 refineries operating at potential full* capacity = 1447 Mbbbl/d ➤ Potential 1 new average-size** refinery operating at full capacity = 241 Mbbbl/d
Refined Products Consumption/Demand	2000 Mbbbl/d	2040 Mbbbl/d
Refined Products Imports	938 Mbbbl/d total <ul style="list-style-type: none"> 690 Mbbbl/d from US 248 Mbbbl/d from Rest of World 	352 Mbbbl/d total <ul style="list-style-type: none"> 64 Mbbbl/d from US 288 Mbbbl/d from Rest of World ➤ Reflects potential increase in Mexico’s refinery capacity from 1062 Mbbbl/d to 1688 Mbbbl/d as depicted above
Crude Oil Production	2187 Mbbbl/d	2575 Mbbbl/d

⁴¹ Tables 2 and 3 describe potential scenarios, based on historical data and the Venezuelan experience. Actual outcomes could be more or less unfavorable to US firms. Note: all data for total 2015 crude oil, refined products and natural gas consumption, production, exports and imports and 2030 crude oil and refined products consumption, production, exports and imports as well as 2030 natural gas consumption and production are from the following sources: IEA. 2016. [Mexico Energy Outlook](#); EIA. 2015. *Petroleum & Other Liquids: Exports by Destination*; EIA. 2015. *International Energy Statistics: Exports of Dry Natural Gas*; Government of Mexico Secretaría de Economía. [Estadística de Comercio Exterior de SE](#). The data for 2030 natural gas imports is based on an assumption that Mexico’s natural gas imports from the US could decline to the same as the lowest market share the US has held on Mexican imports from 2010-2015 (60%). The data for total Refinery Input Capacity in 2030 is based on an assumption of a potential increase in Mexico’s refinery capacity as explained in the table. The breakdown of imports and exports by source country and destination country for the potential 2030 scenario is based on the assumptions also explained in the table. Note that Mexico’s Natural Gas Production combined with Natural Gas Imports differ by ~10 Mbbbl/d from its Natural Gas Consumption/Demand because of data from different sources.

⁴² Source: IEA. 2017. [Energy Policies Beyond IEA Countries: Mexico 2017](#).

Dimension of Mexico's 2015 Energy Balance		Potential 2030 Scenario
Crude Oil Exports	1125 Mbbbl/d total <ul style="list-style-type: none"> • 688 Mbbbl/d to US • 9 Mbbbl/d to China • 428 Mbbbl/d to Rest of World 	887 Mbbbl/d total <ul style="list-style-type: none"> • 0 Mbbbl/d to US • 459 Mbbbl/d to China • 428 Mbbbl/d to Rest of World <ul style="list-style-type: none"> ➤ <i>Potential additional refinery capacity in Mexico could use crude oil from Mexico's domestic production, decreasing the total crude oil available for export</i> ➤ <i>Potential additional crude exports to China may be in exchange for Chinese investment to upgrade refinery capacity</i> ➤ <i>Mexico may not export crude oil to the US because it would not be dependent on US refineries needing that crude oil to manufacture refined products to re-export to Mexico to meet Mexico's demand</i>
Natural Gas Production	681 Mbbbl/d (boe)	736 Mbbbl/d
Natural Gas Consumption/Demand	1314 Mbbbl/d (boe)	1351 Mbbbl/d (boe)
Natural Gas Imports	615 Mbbbl/d (boe) <ul style="list-style-type: none"> • 503 Mbbbl/d (boe) from US • 112 Mbbbl/d (boe) from Rest of World 	615 Mbbbl/d (boe) <ul style="list-style-type: none"> • 369 Mbbbl/d from US • 246 Mbbbl/d from Rest of World <ul style="list-style-type: none"> ➤ <i>Potential decrease in imports from the US could occur from fewer US approvals of exports to Mexico (if no NAFTA) and higher tariffs by Mexico</i> ➤ <i>Potential increase in Mexico's imports from Rest of World could be sourced from the global market</i> ➤ <i>Potentially Mexico could also increase its domestic production of natural gas to a level greater than 736 Mbbbl/d (e.g., from the oil-rich Eagle Ford Basin south of the US border) which would decrease even further its imports of natural gas</i>
Natural Gas Exports	0 Mbbbl/d (boe)	0 Mbbbl/d (boe)

**Full refinery capacity is 89.6%, the 2012-2016 US average⁴³*

***Average-size is the average of Mexico's six existing refineries operating at full capacity*

⁴³ Source: EIA. 2016. [Refinery Utilization and Capacity](#).

Table 3 below summarizes, from 2015/2018 to a potential 2030 scenario how the US could lose access to Mexico’s oil and natural gas market to Russia and China.

Table 3. Future Potential Lost US Access to Mexico’s Oil and Natural Gas Market, 2015-2018 to 2030

	2015-2018	2030 – Potential Future Scenario
Foreign Investor Stakes in Oil & Natural Gas Projects (as of January 2018)	<ul style="list-style-type: none"> • US: <ul style="list-style-type: none"> ○ 19% of 31 blocks awarded to foreign investors have US company with largest foreign investor stake ○ #1 foreign investor in oil and natural gas, by number of projects in which foreign firms have a stake (tie for #1 with China and Russia combined) • China & Russia: <ul style="list-style-type: none"> ○ 19% of 31 blocks awarded to foreign investors have US company with largest foreign investor stake ○ #1 foreign investor in oil and natural gas, by number of projects in which foreign firms have a stake (tie for #1 with US) 	<ul style="list-style-type: none"> • China and Russia: <ul style="list-style-type: none"> ○ Potential 29% of potential future total blocks awarded to foreign investors have Chinese or Russian company with largest foreign investor stake ○ #1 foreign investor in oil and natural gas, by number of projects in which foreign firms have a stake (sole #1) • US: <ul style="list-style-type: none"> ○ Potential 9% of potential future total blocks awarded to foreign investors have US company with largest foreign investor stake ○ #4 foreign investor in oil and natural gas, by number of projects in which foreign firms have a stake (#2 could be Italy, #3 could be Canada – reflecting positions of Italy and Canada in early 2018)

	2015-2018	2030 – Potential Future Scenario
Mexico’s Refineries (2015)	<ul style="list-style-type: none"> 6 refineries in Mexico, operating at 66% design capacity, owned/operated by PEMEX Aggressive US and US-allied investment in Mexico’s pipeline and fuels sectors (does not include refining) 	<ul style="list-style-type: none"> Potential for 7 refineries in Mexico, operating at full design capacity <ul style="list-style-type: none"> 6 owned/operated by PEMEX, upgraded with potential Chinese investment 1 new refinery, potentially owned/operated by Chinese Potential aggressive Chinese investment in Mexico’s refinery, pipeline and fuels sectors
US Refined Products and Natural Gas Exports to Mexico (2015)	<ul style="list-style-type: none"> To Mexico: 21% To Rest of World: 79% 	<ul style="list-style-type: none"> Potential US to Mexico: 5% Potential US to Rest of World: 95%
Mexico Consumption of Refined Products & Natural Gas (2015)	<ul style="list-style-type: none"> Imports from US: 36% Imports from Rest of World: 12% Domestic sources: 53% 	<ul style="list-style-type: none"> Potential Imports from US: 13% Potential Imports from Rest of World: 15% Potential Domestic sources: 72%
Mexico’s Exports to China (2015)	<ul style="list-style-type: none"> Crude Oil: 9 Mbb/d 	<ul style="list-style-type: none"> Potential Crude Oil: 459 Mbb/d

Conclusion: Keep Mexico within the US Energy Sphere of Influence through NAFTA

US national security interests in Mexico rest on continued, growing access to Mexico’s newly-opened energy market. In order to prevent China and Russia from increasing their access to Mexico’s energy sector, the US should increase its energy exports to Mexico and its energy investment in Mexico by pursuing the following in NAFTA negotiations:

- (1) **Bind Mexico in NAFTA to keep its energy market open to the US – Negotiate clear and binding commitments for a US energy presence in Mexico.**

How this benefits US energy and national security: Mexico’s hydrocarbon market was excluded in the original NAFTA (in *Annex 602.3*)⁴⁴, and only more recent reforms in Mexico have opened its energy market to US investors. Mexico’s subsequent constitutional reforms triggered a “ratchet clause” in NAFTA that provides “national treatment” for US investors’ market access to Mexico. The US should strike the text of NAFTA *Annex 602.3* and make it clear in a modernized NAFTA that Mexico’s energy market is open to free trade and US investment, with no exceptions. This would remove any uncertainty and room for interpretation of the current NAFTA’s “ratchet clause” providing US access to Mexico’s energy market.

- (2) **Make a modernized NAFTA permanent – Do not continue to negotiate a “sunset clause.”**

How this benefits US energy and national security: Oil and natural gas projects often last as long as 40 years, with the contractual terms frequently established at the time that US investors bid for the rights to a block or concession, such as in Mexico’s recent oil and natural gas bid rounds. If NAFTA had the potential to sunset every five years, this would add significant uncertainty to US investment in Mexico’s energy sector. NAFTA must be designed to be as enduring as the length of oil and natural gas contracts, which are often for up to 40 years.

- (3) **Strengthen NAFTA’s investment protections and retain Investor-State Dispute Settlement (ISDS) – Do not continue to negotiate for “opt-in/opt-out” ISDS or other weakened investment provisions.**

How this benefits US energy and national security: Countries like Mexico reluctantly accept US investment in oil and natural gas, only to access capital and know-how. Oil and natural gas are geopolitically important and often highly politicized, especially in emerging economies like Mexico where the state owns all the rights to oil and gas and where political leaders come under domestic pressures of “resource nationalism” to retain as much national

⁴⁴ Annex 602.3 of [NAFTA Chapter Six: Energy and Basic Petrochemicals](#) excluded foreign investors and foreign trade from exploration, production and refining of crude oil and natural gas as well as production of basic petrochemicals and their feedstocks and pipelines. It also excluded foreign trade, transportation, storage and distribution of crude oil, natural gas, refined products and basic petrochemicals.

control as possible. US investors in these markets need protections and recourse to international arbitration through ISDS. Without these, private American investments could be – and have been – seized by hostile foreign governments. Since 1996, there have been 64 cases of oil and natural gas expropriation globally that were covered by ISDS protections, including NAFTA. In the past 22 years since the inception of NAFTA, the United States has not lost a single ISDS claim brought against it. And under NAFTA, US investors have won or favorably settled many of the 40 claims against Canada and Mexico. NAFTA should strengthen investment protections and ISDS rather than abandon them through an “opt-in/opt-out mechanism.”