



ENERGY IN THE AMERICAS: CRITICAL REFLECTIONS ON ENERGY AND HISTORY

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Coming Full Circle: Mexican Oil, 1917-2018

Linda B. Hall

During the 1910s, petroleum had begun to be the most important energy resource, in industry as in war. Mexico and Venezuela emerged as key producers of that significant resource; Mexico's oil, next door to the United States and just at the edge of the Gulf of Mexico, poured out during those years, but with very little recompense, as it was recovered and sent to the United States, while Venezuela, under dictator General Juan Vicente Gómez, increased its petroleum production, particularly with the help of Shell Oil and then Gulf. Venezuela was only 3,500 miles from Britain, while Mexico was 5,000 miles away, but uncomfortably close to the United States. During the 1920s and '30s, Venezuela began to produce huge amounts of oil; Mexico tried to recover and save its resources (see Brian S. McBeth in this volume). Argentina's government, hoping to be a contender, set up the first vertically integrated state petroleum company in Latin America, Yacimientos Petrolíferos Fiscales (YPF), yet Argentina was not able to produce high volumes of oil (see Esteban Serrani in this volume). Initially, the two contenders in Latin America were Mexico and Venezuela, but Mexico was looking for something quite different.

Between 1910 and 1917, Mexico experienced a violent revolution, and in the immediate aftermath of the turmoil, its winners focused almost exclusively upon the creation of a new constitution. These leaders, no less than their followers, strongly objected to injustices regarding land and subsoil resources provided to foreign investors by the previous dictator, Porfirio Díaz; they fixated on the protection of these resources, and this fixation included an emphasis on economic nationalism. The most important section of the Constitution they produced in 1917, article 27, concentrated on land and natural resources, affirming on a legal basis that all such assets would be considered the property and patrimony of the state and its people. The sector most affected for our purposes was the modern petroleum industry, which began precisely during these seven years of revolution with the first major discoveries of oil within Mexican territory. Interests from the United States and Great Britain, taking advantage of the chaotic and violent situation, had quickly established dominant positions in exploration and extraction, distributing oil directly out of coastal ports on the Gulf of Mexico. At the same time, industrial and military entities across the world, rapidly recognizing the immense promise of oil, were quickly taking advantage of this viable new fuel source. Venustiano Carranza, the first chief of the revolution and then first president, followed by subsequent presidents from 1920 to 1940, was determined to ensure that this valuable resource would preserve its benefits, in the near and long term, for the Mexican nation and its populace. Ninety-seven years later, these legalities were eliminated in favour of permitting foreign and private subsoil rights. These major constitutional protections, long considered as a basis of the nation's patrimony, were for a time abandoned.

This sentiment reached its apogee in 1938, when Mexico's president, Lázaro Cárdenas, nationalized the entire oil industry—a formative event in post-revolutionary Mexican political history. In the decades that followed, the notion of reintroducing private or other foreign ownership of the country's "oil patrimony" was politically anathema. However, first in the 1990s, amidst the advent of the North American Free Trade Agreement (NAFTA) and other market-focused legislation, and then with greater speed in late 2000, a series of presidential regimes trained by elite (usually US) institutions in economics and business and public administration began to crack open the door to private and foreign interests. In recent years these efforts have gained even stronger momentum, and finally, in 2014, the national Congress altered the Constitution to legally sanction this participation. As a result, a series of nationally sponsored auctions

were scheduled for mid- to late 2015 to allow new kinds of exploration and production operations. These auctions represent important political and economic changes in Mexico's natural resource regime, shifting the state's political ideology significantly over a period of almost a hundred years.

The Mexican Constitution of 1917 was a bold document. President Carranza and his cohort had a clear mandate from the Mexican populace to make radical transformations, and they took advantage of his faction's military and political victories to do so. Specifically, article 27 stated that all "lands and waters" were vested in the nation itself and were to be used for the well-being of its entirety. While article 27 did recognize in some cases that private property could be created by the conveyance of title to individuals by the nation, rights to the subsoil could *not* be so conveyed; rather, these were held in "direct dominion" by the Mexican government itself. Critically, all rights to the exploitation of the subsoil became concessions from the nation.¹ Carranza and the rest of Mexico's revolutionary leadership were well aware of the value of the country's oil fields; at the same time, the US and British oilmen who had already exploited those fields were concerned about their access remaining open. For Carranza's government, like that of his successor, Álvaro Obregón, revenue from petroleum represented the only viable resource with which to re-establish government functions and to develop new programs.

Even before Carranza had become president, he had tried, in his role as first chief, to tax oil production. After his inauguration as president, and now recognized by US president Woodrow Wilson, he further attempted to charge royalties, invoking the principle in the new Constitution that subsoil resources belonged to the nation. Still, he was unable to implement the decree, as foreign oil companies did not comply and Carranza had no power to compel them to do so. His administration then began to issue less restrictive drilling permits at the end of 1918, in an attempt to encourage compliance. When Obregón became president in late 1920, he likewise tried to control his nation's own resources via its newly established constitutional powers. At the same time, he had to proceed carefully because there was not enough capital—public or private—within Mexico at the end of the revolution to develop the oil fields. Meanwhile, new US president Warren Harding, inaugurated in March 1921, refused to recognize Obregón's administration in order to maintain leverage on a series of

issues between the two countries, especially a dispute involving former US senator Albert Fall, who had become Harding's secretary of the interior and who had taken over his portfolio on oil issues. In 1919 and 1920, Fall had directed "the investigation of Mexican affairs" in the Senate and then attacked its government; then, in December 1920, he tried to bribe Alvaro Obregón just as he was about to be inaugurated president. Obregón refused, and Fall became an implacable enemy to Obregón and his administration. This lack of recognition, and in turn this lack of capital, slowed the process of economic recovery as the Mexican administration struggled to pull the country out of years of economic disaster. Petroleum was the only sector that might generate sufficient revenues to this end; agriculture and mining had largely been destroyed, and it would take time and great effort to bring them back to productivity. Meanwhile the British, with the end of the First World War, re-established ties with US companies in Mexico and then largely deferred to them in regard to further oil questions.

In May and June 1921, shortly after he had taken office, President Obregón instituted taxes on petroleum—a production tax of 10 per cent at US (rather than wellhead) prices and an export tax. The second levy, as much political as economic, emphasized the importance of Mexican oil holdings to the world market. These taxes were tied to economic development, to conservation, and to addressing environmental damage caused by exploration and extraction.² The US Association of Petroleum Producers in Mexico reacted by quickly cutting off oil shipments. However, a modus vivendi was soon reached after discussions in the late summer of 1921 between Mexican secretary of finance Adolfo de la Huerta and leaders of five of the most powerful US oil companies operating in Mexico, including E. L. Doheny and Harry Sinclair. The petroleum magnates were eager to come to a long-term understanding on taxes so that they could make "definite sales commitments over considerable periods of time," with reasonable information in pricing decisions. Further, they wanted to continue seeking new sources of supply and, in general, to avoid pesky regulations.³ The result was that production taxes were continued for future yields only, with the question of rents and royalties left to the courts. An agreement was also made concerning export taxes, allowing the Americans to pay with Mexican government bonds discounted at 50 percent, left over from the counter-revolutionary presidency of Victoriano Huerta in the

mid-1910s. The petroleum companies had obtained an agreement they could live with, while the Mexican government had solved two problems: taxes would in fact be paid, albeit at a reduced rate; and the Treasury could begin the important work of retiring the foreign debt, thanks to the acceptance of the Huerta bonds for tax exports.⁴

A little over two years later, with the intention of finalizing a more permanent agreement and with Obregón's government still unrecognized, Mexicans and US negotiators met again—this time under the aegis, albeit somewhat unofficial, of both governments. On this occasion, the auguries for success were better thanks to some extenuating circumstances. Secretary of the Interior Fall at that time had been forced to resign from Harding's cabinet after a scandal involving the Elk Hills and Teapot Dome oil reserves and US oilmen Doheny and Sinclair (both also involved in Mexican oil), just as Obregón and Harding were becoming more amenable to an agreement on Mexican petroleum.⁵

With Fall neutralized and then out of the way, both administrations were ready to move forward. To this end, they began in 1923 to discuss the so-called Bucareli agreements, named for the mansion in Mexico City where the talks were held. None of the negotiators were officials of their specific countries, and no treaty was discussed, as the fragile Obregón administration could not politically admit what seemed to be a demand from the United States. Rather, it was regarded as a "gentlemen's agreement." At this point, the oil companies were concerned that rights held previous to the 1917 Constitution were at risk and that article 27 might be applied retroactively. On the Mexican side, a remarkable series of memoranda lets us know precisely how Obregón's administration were informing their intermediaries in response to US queries and demands. 6 These documents made clear that the Mexicans were eager to continue and expand US investment. Yet they would not accept any binding changes in the principles of article 27, nor would they brook anything less than the full retention of authority vested in the Mexican courts concerning claims on land and subsoil rights.

The crucial document was Memorandum #8, which insisted that the major nations of the world accepted the principle that such rights belonged to the country in which they were located; certainly neither Obregón nor anybody else believed that this argument would be decisive with US

negotiators, but it helped frame Mexico within a global context for the purpose of these negotiations. Moreover, in a tactic that would become common in the Mexican system when politicians negotiated either externally or internally, they changed the terms. "Confiscation" (confiscación) was not occurring; to the contrary, it was a mere "adjustment" (ajuste). Though this approach, too, would never fly with the United States, it was a first step in the crucial Mexican insistence on the broad notion of government concessions as opposed to absolute rights on the part of property owners or leaseholders. Yet the Mexicans tried to reassure the US representatives (and thus the US companies) that they would have rights of their own, emphasizing that if evidence had been provided or some sort of contract had implied an agreement to work on the subsoil, rights thus acquired would be protected.⁷

When these points were actually discussed by the Bucareli negotiators, they were quickly agreed upon, indicating that very likely there had already been an understanding about petroleum before the meetings began. The finalized agreement turned on the question of "positive acts": that is, if almost any kind of action had been taken on the land, such as the drilling or even simply fencing, that action would be taken as proof that development of the land for economically useful purposes was intended. Leases themselves were taken as evidence of prior rights that would accrue to those who had undertaken these transactions. Land itself, however, was another matter, as some of the companies had bought extensions of land on which they had not begun to work, and therefore there were no positive acts. Still, an agreement was possible in these cases as well. If the price paid for a property was high enough so that it was clearly intended for the production of subsoil resources rather than for agriculture, the negotiators agreed that this kind of evidence would indicate positive acts. Thus, the Mexicans indicated that they would acknowledge preferential rights for these owners of the surface property. The Mexican delegates therefore provided a level of comfort that the rights of US property holders would be preserved—at least for the moment.8

Two weeks after the Bucareli meetings began, the discussion moved to the agrarian question, by far the knottiest problem to face the negotiators and a topic that is outside the scope of this chapter. By 15 August 1923, however, they had agreed to drafts on all crucial matters that, though

not binding, involved the certification of the minutes of the meeting. Recognition from the United States quickly followed on September 3.¹⁰ The process had been helped along by a brief visit to Mexico by William Randolph Hearst, the powerful newspaper owner, who on his return to the United States expressed his conviction that the talks would lead to official recognition of the Obregón presidency along with improved economic conditions and commercial relations.

The Bucareli agreements were later attacked by Obregón's political opponents as giving away Mexican oil and giving in to the United States; however, because they set the basis for continued drilling and oil extraction, the agreements permitted oil to flow again and thus subsequent tax revenues to make their way into the Mexican exchequer. At the same time, the agreements re-established that rights to control the subsoil belonged to the nation. Each subsequent Mexican administration extended these rights still further, until finally, in 1938, President Lázaro Cárdenas shocked the world by taking the radical step of expropriating almost all the foreign oil companies still operating in Mexico. While disagreements between the two nations emerged on petroleum issues from time to time, the intractable behaviour of foreign oil adventurers faded into the past.

Cárdenas established a single government entity to control oil-related activity in the country: Petróleos Mexicanos, or Pemex. Since the formation of Pemex and until very recently, the Mexican government has enjoyed, at least in theory and much in practice, exclusive control of the basic petroleum business, including exploration and production, refining, and retail sales. However, over the last two and a half decades, beginning particularly in 1991, attempts have been made to dismantle the two major rallying points of the Mexican revolutionary Constitution of 1917—rallying points that Cárdenas skillfully invoked in his campaign to nationalize the oil industry: the more equitable distribution of land, and the use of the subsoil beneath it as belonging to the nation's populace.

The significance of protecting these resources was intertwined with Mexico's national identity, and any attempt to move back in the direction of privatization was for decades impossible. Efforts to rewrite the revolutionary script appeared from time to time, but in the early 1990s, this push finally began in earnest, and it has accelerated over time. This new vision, advanced particularly by Mexican presidents no longer interested in the

revolution's precepts, involved efforts to gain for the country more international respect, particularly in economic terms. The various presidents involved were influenced by their own backgrounds and foreign training. The changes they advocated necessarily reduced the social content of legal protection while opening access to various kinds of private investment. A very important moment came in 1991 when then President Carlos Salinas de Gortari (who had attended Harvard) changed the status of communally held properties, known as ejidos, by declaring that land distribution would immediately cease and that the land reform program was over. Despite a good deal of pushback from the public, Salinas's government formally submitted legislation to the Mexican Congress in November of that year, seeking to modernize the agrarian sector (as the administration explained) by opening it to other kinds of domestic and foreign investment.11 In December, Mexico's Chamber of Deputies voted 387 to 250 to amend article 27, such that limits on the size of landholdings were moved significantly higher. Demonstrations against the measures continued for some time, but that portion of the Constitution of 1917, which previously had been untouchable, was significantly compromised. President Salinas insisted that his action had been necessary to protect Mexican agriculture from potentially negative effects stemming from NAFTA, the proposed agreement with Canada and the United States that, ironically, he himself vigorously supported. Opponents were not mollified, and sporadic obstruction is still used in an attempt to protect ejido land against government or other projects.12

Another portent had already occurred two years earlier: the arrest and imprisonment in January 1989 of Joaquín Hernández Galicia, the head of the powerful oil workers' union, just over a month after Salinas had come into office. This action indicated that from the very first days of his administration, Salinas had had the intention of making a move on subsoil rights, particularly petroleum. He viewed Hernández Galicia as an impediment to the implementation of private participation. However, scandals that unfolded over several years involving Salinas's brother Raúl concerning embezzlement, money laundering, and even murder, derailed the president's ability to move forward. Nevertheless, minor—and in some cases, not so minor—changes continued in the energy sector. Yet in 1994, as Salinas was concluding his six-year presidential term (known as a *sexenio*), Mexico's

political landscape was thrown into turmoil by the assassination of the Partido Revolucionario Institucional (Institutional Revolutionary Party, or PRI) candidate chosen to succeed him, Luis Colosio (who had attended the University of Pennsylvania). Ernesto Zedillo, a colourless PRI official with a PhD in economics (this time from Yale) was chosen to replace the murdered candidate. During Zedillo's *sexenio*, he avoided major shifts in oil politics, and even opted to amnesty Hernández Galicia in 1997. No movement of any consequence concerning property rights and the energy sector occurred while he was in the presidency.

In 2000, the political landscape in Mexico changed significantly, as Vicente Fox (Harvard), the candidate of the relatively conservative Partido de Acción Nacional (National Action Party, or PAN) became president. Until that election, the PRI had been in power for seven decades, though it had changed names occasionally along the way. Both Fox and his successor, Felipe Calderón (Harvard), also from the PAN, tried to make significant changes in regard to subsoil rights. The Fox administration attempted major modifications to modernize the energy sector and Pemex itself. In a particularly blatant move, Fox, just a few weeks after his inauguration, named four extremely wealthy corporate leaders to the Board of Directors of the state-run oil company, most notably Carlos Slim Helú, chairperson of communications giant Telmex and one of the richest men in the world.¹⁴ Public outrage began immediately, and Fox quickly reconsidered the appointments. In May, he shifted these members off the board and created a less controversial eight-person advisory committee instead 15

Other new initiatives in the energy sector involved the storage and processing of liquefied natural gas. President Fox, who had hoped to avoid some of the issues surrounding petroleum by focusing on natural gas instead, began in 2002 to issue multiple-service contracts (contratos de servicios múltiples, or CSMs) to attract private capital to explore, extract, and liquefy that resource. In 2004, Fox came in for criticism for holding secret discussions with Chevron Texaco for a liquefaction plant in the Coronado Islands, off the coast of Baja California, at the same time that the Bolivian government suggested selling natural gas to Mexico. Shortly thereafter, the Chamber of Deputies declined to pursue a constitutional challenge to these arrangements, largely because of the internal failure to produce

adequate natural gas, despite what were assumed to be huge holdings and reserves within Mexico itself. More inflammatory, perhaps, was the accusation that foreign companies, through Pemex itself, were illegally operating Mexican retail gas stations.¹⁶

Meanwhile Fox, in meetings with Russian premier Vladimir Putin, began to negotiate arrangements for Russian investment in Mexico's energy sector, including the possibility of a liquefaction plant, once more in Baja California. Again, the Mexican public reacted negatively. Fox shifted focus slightly when he decided in July to bring the country into Mercosur, the Southern Cone common market, though in an "associate" status. With this new affiliation in hand, he then approached Petrobras, the Brazilian national oil company, seeking to help Pemex with deepwater drilling technology.¹⁷ At the same time, problems of corruption and even fuel theft plagued Pemex, as they still do.18 Finally, in 2005, in the penultimate year of Fox's term, the Mexican government fined six former Pemex officials for diverting funds to the PRI's presidential campaign. Some senators suggested that attention given to the case was designed to deflect criticism from First Lady Marta Sahagún's two sons, who had been accused of using their connections in the Fox administration to obtain 2.5 billion Mexican pesos in construction projects.¹⁹

Though objections to Fox's programs continued to roil the political atmosphere through the end of his term, his successor also attempted changes in oil policy. As President-Elect Calderón (Harvard) was coming into power in the autumn of 2006, the Congress overwhelmingly voted to overhaul Pemex; it also permitted the paraestatal to hire private foreign companies for fundamental activities in the oil sector. Further, Pemex, which had been giving a very large proportion of its revenues to the government, gained a bit more control over these funds. Mexico's third major political party, the Partido de la Revolución Democrática (the Party of the Democratic Revolution, or PRD), led by former presidential candidate Andrés Manuel López Obrador, opposed any form of private participation in Pemex. Despite this intense opposition, legislators produced an initiative that would limit private-sector participation in the oil sector but not exclude it. One PRD senator overstated the case when he said that "no one disagrees with the participation of the private sector"; even so, this conciliatory comment was indicative of some movement in legislation and practice. A reminder of the still emotional nature of the proposals, however, was the decision to hold the 23 October 2008 Senate vote away from its normal meeting place to avoid López Obrador's threats to disrupt the proceedings. When the ballot in the Chamber of Deputies was held in its own normal meeting room several days later, a small number of legislators from the PRD and another party, the Partido del Trabajo, took the podium to disrupt the proceedings, though they were ultimately unable to stop the overwhelmingly positive vote.²⁰ The new legislation, backed particularly by the PRI and the PAN and supported by some in the PRD, also established a new form of integrated service contract, replacing Fox's CSMs, which had largely failed to attract interest from the private sector. These instruments offered more financial incentives, including the promise of flat per-barrel fees and reimbursement of some recovery costs. After a series of challenges, the Mexican Supreme Court validated these private contracts, though this decision also attracted criticism, including an accusation that the justices "had amnesia about history."21

Two years later, new refineries that would include partnerships with private companies were announced, with Calderón underlining the positive implications for job creation. At the same time, he heralded the discovery of new deposits in the shallower waters of the Gulf of Mexico, important because the rate of depletion for Mexico's oil fields ran ahead of its reserves. A troubling note was injected into the discussions in the same year (2010), when a report from Transparency International, based in Berlin, reported that Mexico ranked 98th out of the 178 countries on its Corruption Perceptions Index. One of the institutions considered most difficult to control was, unsurprisingly, Pemex. In the following year, Pemex awarded contracts for exploration and extraction in several fields in Tabasco state to both foreign and Mexican private enterprises, the first that had ever been approved in this way. Unsurprisingly, many objected, claiming that the changes violated article 27.24

The most extreme change, finally, came with the return of the PRI to the presidency in 2012 in the person of Enrique Peña Nieto (Instituto Tecnológico y de Estudios Superiores de Monterrey/Monterrey Institute of Technology). Sensing the battle to come, López Obrador broke away from the PRD, the political party that had sponsored his candidacy for the presidency in the previous election, to build a separate "citizen movement," which

he had initially formed in 2011, known as the Movimiento Regeneración Nacional (the National Regeneration Movement, or Morena). While there was some concern that this new group might seriously divide the Left, López Obrador asked his followers to be sure to take only actions that "do not harm third parties," and his withdrawal from the PRD did not at first take on a "vengeful" character.²⁵

Peña Nieto very early in his administration showed that he would not tolerate obstructive behaviour by leaders of Mexico's unions when he arrested the long-time head of the teachers' union, Elba Esther Gordillo, on charges of corruption. This action echoed President Salinas's jailing of the head of the oil workers' union at the beginning of his sexenio.²⁶ Peña Nieto was equally eager to move on to petroleum reforms. The president was aided in his efforts by a huge explosion in the Mexico City headquarters of Pemex that cast doubt on the ability of the company to provide a safe environment for its workers, including those in administrative jobs.²⁷ In early August 2013, almost a year into his administration, Peña Nieto proposed changes to the regulatory plan that had previously limited the access of external and private companies to investment in Mexican petroleum. As the Christian Science Monitor reported, "Analysts say Mexico's economic future-and the competitiveness of North America in the global economy—is at stake." The article estimated that Pemex had only ten years of oil reserves remaining, as its shallow-water fields in the Gulf of Mexico had begun to run out. It emphasized that the company lacked the technological know-how to exploit deepwater discoveries, and that although Mexico was believed to have significant amounts of shale oil and natural gas, it lacked expertise and capital as well. The president's initiative suggested that appropriate examples for Mexico to follow would be those of Brazil, Colombia, and Norway: all had state-owned oil companies accepting various kinds of partnership arrangements.²⁸ In presenting his program in a series of television advertisements, Peña Nieto took care to invoke the image of Lázaro Cárdenas, who as president had expropriated the foreign oil companies in 1938 and was widely hailed at the time as the great defender of Mexican patrimony. Cuauhtémoc Cárdenas, the former president's son and a long-serving leader in the PRD, expressed his disgust at this historically manipulated tactic.²⁹

Meanwhile, by late August 2013, all three of the major governing parties had made a number of public proposals for an overhaul of the energy sector. While agreeing on the goal—enough capital to modernize the parastatal energy companies, primarily Pemex—they differed as to the means. The PRI and the PAN wanted to permit private and other foreign investment, while the PRD preferred to see Pemex keep a larger share of its profits for reinvestment. A further proposal shared by all three parties was the creation of a national-level office to administer the future profits of oil and gas. The difference in emphasis was significant, with the PRD's proposal envisioning much greater government oversight of Pemex. In an effort toward transparency, the PRD's proposal recommended the removal of almost all government and petroleum union officials from the Pemex board.³⁰ Public opinion polls on the issues varied significantly, depending on who was taking them, whom they were asking, and how the questions were framed. At the same time the PRD and Morena pushed for a citizen referendum on the issue, hoping to get a fairer measure of the public voice.31 Coincidentally and symbolically, Hernández Galicia died in November 2013 at the age of ninety-one.32 Just a few weeks later, the PRD withdrew from the coalition with the PAN and the PRI that was considering various reforms that might have led to a joint proposal; the issue at hand was said to be secret meetings that PAN and PRI leaders were holding without PRD involvement.33

Amid these political gyrations, in an informative and startling interview in November 2013, widely respected Houston energy expert George Baker predicted that Pemex would become "a new company of mixed capital, as a State-majority-owned enterprise with minority shares on the New York Stock Exchange." The principal advantage would be that "it could enter into commercial alliances with other oil companies." Still, however, little could be done in the event that Pemex, as a partner in a consortium, would refuse to accept responsibilities for environmental problems, a stance it had taken in the litigation in Texas following the infamous Ixtoc-1 blowout in 1979. Such new associations, Baker suggested, could be established either inside or outside Mexico, including within US waters of the Gulf of Mexico, where several state-owned oil companies already owned drilling rights. In Baker's opinion, the government should

"take . . . the oil regime outside the Constitution," a notion he characterized as "an important and long overdue step." ³⁴

In mid-December 2013, the PRI's initiative passed easily with support from the PAN and two other smaller parties over the opposition of the PRD and López Obrador's Morena. Shortly before the proposal came up in Congress, the Morena leader suffered a heart attack, keeping him from organizing his normally enthusiastic street rallies. A few showed up anyway; estimates ranged from a thousand to three thousand demonstrators "at the peak of the protests," far fewer than the Morena organization had anticipated. Even Cuauhtémoc Cárdenas, however, who served as an important spokesperson for the PRD's opposition to the legislation, had discouraged street demonstrations, insisting that they would not be effective. Meanwhile, immediately after congressional passage of Peña Nieto's legislation, seventeen states, more than half the total, provided the approval that was required for the modifications to the Mexican Constitution. All these states had majority PRI and/or PAN membership in their legislatures.³⁵

Despite a setback from a major financial scandal in March 2014 involving Oceanografía, a private shipping company heavily contracted by Pemex, and its loans for millions of dollars based on fraudulent documentation from Mexico's largest bank, Grupo Financiero Banamex, the energy legislation continued to move forward. The PRI was able to avoid major blame for the scandal, as the fraud itself occurred while the PAN controlled the presidency. Almost simultaneously, a new law, the *Ley de Consulta Popular*, made it possible for citizens to call for a referendum, but it was not easy. In the event that voters rather than legislators wanted to initiate such a procedure, huge numbers of signatures were required; 2 per cent of those voters registered would have to sign the relevant petitions. The PRD pushed briefly for a referendum before the secondary laws were presented, though the rapid changes the PRI and the PAN pushed forward made calls for a referendum moot. The PRD pushed forward made calls for a referendum moot.

In an indication of the degree to which popular attention was focused on the debate concerning energy reforms, Alfonso Cuarón, within a few months of winning the Academy Award for directing the film *Gravity*, insisted in a full-page paid advertisement in the Mexico City newspapers *Reforma* and *La Jornada* that the government answer questions revolving around two major issues in the petroleum equation: corruption and the

environment. The PRI and the PAN responded to neither, with the exception of some vague messages on social media, and Peña Nieto sent along the secondary laws that would permit implementation of his proposals to Congress.³⁸ Though the controversy about the new laws continued through the summer months, in mid-July these pieces of legislation passed with "overwhelming support." These changes concerned reforms to articles 25 and 28 of the Constitution, as well as article 27.³⁹

Among the 250 modifications that were made in the drafts of these laws on the way to passage, the word expropiación (expropriation) was changed to ocupación temporal (temporary occupation) in an attempt to make the package seem less threatening to rural landowners who feared that they would lose their holdings. The PRD, in opposition, called the new laws despojo (dispossession). Yet a senator for the PAN argued that there would be recompense for whatever damage occurred to the land, along with some payment to the landholders in the event that hydrocarbons were discovered that could be exploited commercially. While the speaker insisted that "rural people and owners of the land will be enormously benefited by all the riches of their lands," there were many who doubted this claim. However, not even the percentage of profits from the extraction and sale of hydrocarbons that would accrue to landholders would be fixed by the law; rather, as an article in La Jornada explained, that determination would be made by the Secretariat of Energy (SENER), which would "establish the methodologies, parameters, and guidelines which could serve as a reference to determine the percentage." Later, another PAN spokesperson explained that these might range from 0.5 per cent to 1.5 per cent of the profits, though skeptics-including this author-believed that given the potential for manipulation of the financial accounts, landholders would get little or nothing. Further, "ejidatarios, comuneros, y productores privados" (ejido owners, commoners, and private producers) would be required to deliver their properties, including "lands, woods, and waters," to concessionaires in legal easements, with payments to be negotiated by the Sedatu (Secretaría de Desarrollo Agrario, Territorial y Urbano) in the event the landholders rejected their offers. In response, apparently, to the doubts of questioners, the PAN's commentator continued to insist that the present landowners might even become, to their benefit, "employees" (empleados) of the contracting company.

Further, the landowners, along with their family members and residents of the affected communities, would be protected by the Procuraduría Agraria, a part of Sedatu itself, should they need assistance. Doubts, of course, remained. Emailed responses to press reports of these clauses in the proposed legislation and the PAN and PRI responses indicated not only skepticism but outrage. Some protested that these changes signified a return to the time of President Porfirio Díaz, before the revolution and certainly before article 27. One particular response objected that the legislation amounted to "a blank check, everything for sale, everything given over to the counterrevolution. . . . When will we see the pendulum effect? How can we go back? A sold-out government . . . everything for sale . . . cynicism and shamelessness. When will we be a people with a decent government?" 40

Nevertheless, the approval process continued through mid-August, with the PRI, the PAN, and two smaller parties voting in favour. On 11 August 2014, President Peña Nieto enacted the secondary laws for his program of energy reform. Still, the PRD and Morena continued in opposition, yet small payments to landowners for the oil and natural gas from their properties quickly became part of the law. Perhaps more importantly, a larger percentage of profits was earmarked for state and municipal governments, as opposed to the national Treasury, which would see its tax revenues from hydrocarbons diminish significantly. Estimates claimed that by 2025, Mexico's oil production could return to 3.5 million barrels a day (BPD), as it had been in 2004 before dropping to 2.5 million BPD in 2013. Fears about fracking and its potential environmental damage also roiled the political atmosphere, but the presidents of the PAN and PRI celebrated "the triumph of consensus" (el triunfo del consenso) while at the same time publicly claiming credit for the "victory" (victoria) of the new legislation's passage. At the same time, the secretary of finance, Luis Videgaray, stated that Pemex would see a "historic reduction" in its taxes, from 71.5 per cent to 65 per cent, and that it would also enjoy complete control over the use of its own resources. Still, he emphasized, government revenues would increase, "given that there will be more participants in the industry investing and extracting hydrocarbons."41

Two days later, the press made clear that the large majority of currently active oil fields (83 per cent) were set aside for Pemex, though others

along with Pemex would be permitted to bid on the remaining 17 per cent. The company's chief executive, thirty-nine-year-old former investment banker Emilio Lozoya, announced that competition would help the company. He anticipated that Pemex would soon return to its previous status as the largest oil company in Latin America, a pride of place that recently had been taken over by Brazil's Petrobras. Mexican officials indicated their hopes that the bidding for available concessions would start in 2015. Some officials also said they believed that the most appealing concessions, to US companies in particular, might be those in the deep waters of the Gulf of Mexico. Others believed that some of the shallow water concessions would be preferred—in particular those that had been identified for the initial round of the phase one bidding process in 2015, with phases two and three to appear later that year. The share reserved for Pemex of "proven and probable reserves" amounted to 20.6 billion barrels of crude oil equivalent—that is, 15.5 years of continuous output at "current production levels."42 Only a few days after the promulgation of the laws, Pemex announced that it was creating its own drilling, logistic, and electricity affiliates, a move that had certainly been planned earlier. Its previous four divisions were reduced to two: the first involved exploration and production, the second "industrial transformation," which is to say petrochemical and refining operations. No longer would Pemex be expected to carry out development projects that did not benefit the company, according to Lozoya. "Our objective is to make money," he announced. 43

Meanwhile, on August 15, new laws toward private and foreign companies were announced, opening the Mexican petroleum sector for the first time since 1938. The government insisted that the new provisions would add US\$590 billion to the Treasury's coffers, and that these funds would be made available for important infrastructure projects, especially related to transportation. In particular, new airports and new passenger train lines were mentioned, as well as upgrades and the doubling of the country's port capacity. At the same time, on August 20, Energy Minister Pedro Joaquín Coldwell insisted that Pemex would be remaining 100 per cent in state hands, and it would have significantly greater powers to control its own business strategy. Still, the problem was acute: government funding across the board, including for infrastructure projects, had shrunk significantly in the prior ten years due in large part to Pemex's

sharply reduced figures. In recent decades, Pemex had typically provided up to a third of the funding of the entire federal budget. Even as production slipped sharply after 2004, the number of Pemex employees soared, from 110,000 to 160,000, putting greater strain on Pemex and federal finances.⁴⁴

Only a few months later, all of Mexico's forecasts were shattered as global oil prices plunged from US\$100 a barrel to around US\$60—and the price seemed poised to plummet even further. The administration's earlier optimism suddenly slumped, and it announced on 31 January 2015 that its budget would be cut by 124.3 billion Mexican pesos (US\$8.4 billion) through the year. Substantial portions of the previous plans concerning energy and transportation were reduced by the government's budget, including Pemex, which lost US\$4.2 billion of its budget; and the construction of the high-speed rail from the Mexico City to Querétaro was postponed. At the same time, Pemex service contractors quickly began dropping employees, indicating that 10,000 had already been laid off; Pemex employees themselves were spared. Meanwhile, economic analysts in the city of Ciudad del Carmen, in the gulf state of Campeche, where a significant portion of oil employees were based, expected to lose 50,000 jobs as a result of the Pemex losses.⁴⁵

On 14 March 2015, the New York Times reported that expectations of initial bids during the upcoming Mexican auctions would still be strong, despite the fall in oil prices. When, in August 2014, oil was at US\$100 a barrel, the Mexican administration had been claiming that the new petroleum investments from foreign and private companies would be making US\$12 billion a year over four years, and that oil production would be a half million barrels a day greater than it was at present. Now with oil prices sagging and his budget lowered, Pemex director Lozoya reported that the company had to cut back its expansion plans for the Gulf of Mexico, though he still hoped to discover other well-heeled partners to make up some of the difference. Meanwhile, the government indicated that the first phase one auction, expected in July 2015, would be critical to the success of the entire program. It included several blocks in shallower, lower-cost waters close to other successful areas. Mexico's undersecretary for hydrocarbons within SENER, Lourdes Melgar, pointed out that these properties were in a "highly productive oil area," while other fields were

more "complicated," including shale and deepwater. Mexico, she said, still had advantages: it was close to "resources, both conventional and unconventional . . . where we have a lot of diversity. You're not talking about a frontier area." Yet clearly, as Luis Miguel Labardini, consultant with Marcos y Asociados, noted, "the Peña Nieto administration put all its eggs in the basket of energy reform. If they mess it up, this administration's doomed."⁴⁶

At the same time, US analysts agreed that Mexico was in a much better situation than many other oil nations, despite the price decline. Carlos Pascual, senior vice-president of IHS Energy Consulting Services and formerly an energy analyst with the US State Department, pointed out that Mexico "is just in a different world" compared with oil nations such as Iraq and Nigeria. At the same time, energy expert Jeremy Martin, at the Institute of the Americas in San Diego, conjectured that it would be very difficult for Mexico to increase production by the promised 500,000 BPD, but still believed that many foreign companies remained as interested investors, at least in the long term, a viewpoint also adhered to by well-known oil analyst David Shields. According to these analysts, the Mexican administration would now have to lower its requirements for bidders to enter the auction process; further, it would be forced to add a wider selection of potential investors, implying the inclusion of some less desirable candidates. Still, the government decided to proceed with the auction. There were opportunities in Mexico, and others were beginning to take interest, though it might take years rather than months. Ali Moshiri, president of Chevron Africa and Latin America Exploration and Production Company, noted that Mexico was at least "a long-term strategy."47

By April 2015, forty oil companies had examined the geological information provided to them for the first of the phase one auctions, and in July, more than a dozen were looking at phase two.⁴⁸ Shortly thereafter, on 6 May 2015, phase three was announced, and it included twenty-nine onshore areas in five states. Phase one now included fourteen shallow-water exploration blocks, which together amounted to a total of 1,630 square miles in Veracruz, Tabasco, and Campeche. Thirty-one companies, at that point, had filed pre-qualified bids on the contracts. Phase two, now

announced for September 30, included nine shallow-water blocks, but the area was relatively small, with only 108 square miles.⁴⁹

Less than two weeks later, Finance Minister Videgaray announced that he was "depetrolizing" Mexico's public finances—largely as a response to the radically reduced oil price. Pemex's contribution to the federal budget revenues in the first quarter 2015 had dropped sharply to 16 per cent of the total, compared to the average 30 per cent for 2014. Nevertheless, Mexican government statistics agency INEGI claimed that the nation's gross domestic product had expanded by 2.5 per cent in that first quarter in spite of the drop in oil prices. Yet the Pemex shift was stunningly steep. Videgaray quickly indicated that "Mexico cannot depend on oil to sustain its public finances," noting that the taxpayer base was increasing and was helping to sustain revenues. The country continued to grow, investment was coming in, and unemployment was dropping, while inflation remained down. Still, the Mexican administration was clearly scampering.

Then suddenly, in June, with the first auction barely a month away, Pemex president Lozoya announced the company's first major oil breakthrough in several years. Located in shallow water off the coasts of Tabasco and Campeche states, the new fields comprised perhaps the largest new finds since the 1976 discoveries of the huge Cantarell field. Lozoya cheerfully estimated that the four new fields would be producing 200,000 BPD of crude oil within sixteen months, and 170 million cubic feet of gas per day in four to five months—an equivalent of 350,000 BPD of oil in no more than two years. José Antonio Escalera, Pemex's director of exploration, was a bit more circumspect, suggesting that it would take three years to reach the fields' full potential; nevertheless, the news overall was highly positive for the government's oil narrative. The blocks for auction, conveniently, were near the locations slated for phase one.⁵⁰

Yet as July 15 arrived, there was almost no interest. Of the thirty-four companies that had initially signed up for pre-qualification, only nine had actually registered to make offers and only two lots received successful bids. These two were submitted together by a consortium comprising US firm Talos Energy, Britain's Premier Oil, and Mexico's Sierra Oil and Gas. While these bids were welcome, the overall dearth was a significant disappointment to the government. Certainly, the continuing glut of oil internationally and the rapid decline in prices contributed substantially

to the lack of interest. In addition, however, just before the auction, the world was once again reminded of the widespread presence of corruption and lawlessness within Mexico, and of the government's continuing inability to contain it. On July 11, four days before phase one, Mexico's most notorious drug trafficker, Joaquín "El Chapo" Guzmán Loera, escaped (and apparently, with little difficulty) from maximum-security prison El Altiplano, marking the second time he had escaped from incarceration. While it was unlikely that the story made much difference in the auction, the government was dismayed and embarrassed.

Certainly the auction was partly the result of the cratering of oil prices toward US\$50 per barrel, but it was also likely that concerns on regulatory terms were still an issue. Further, no Mexican administration could agree publicly without reasonable terms. The administration claimed that the process was a "solid start" for providing "transparency" in the process. Still, the outcome of the first auction was highly unsatisfactory. Petroleum was not the new answer—not yet, anyway—for Mexico's prosperity.⁵¹

Given the rough start to the auction process, the potential success of the program remains unclear. Phase two in late September had only five offshore fields, and they were in locations "already discovered." Pablo Medina, of the Wood Mackenzie consultancy of Houston, notes that "the government is doing what it can to create more upside" in order to attract other companies. One tactic was to publish minimums ahead of time, thinking that a bidder that is close may move a bit higher. Fortunately, three of the five blocks were awarded on September 30, though two of them, in the southern section of the Gulf of Mexico, went unclaimed. As phase three moved toward 15 December 2015, the Mexican administration began using different strategies, providing licence contracts that are focused on encouraging its own "upstart Mexican companies."

Meanwhile, the United States and its expanding contribution can be viewed more supportively and collaboratively than in previous decades. US businesses as well as the US government continue to be favourable to Mexican oil; the two countries are just next door, they have been connected by NAFTA for more than twenty years, and they also have multiple reasons to be involved with co-operative economic well-being. Mexico's energy products do not require travelling great distances, and they are geologically accessible.⁵⁴ Further, politicians may look more positively at

Mexican economic issues, despite the toxic discussions about narcotics trafficking and immigration. As an example, in early 2015, twenty-one Republican senators suggested that US-Mexico petroleum swaps could work for both countries, despite the many years in which it had been illegal to export US crude. Two of these senators were Ted Cruz of Texas and Marco Rubio of Florida, both candidates for the 2016 Republican presidential nomination. In August of 2015, President Barack Obama made these swaps possible. It may be that Porfirio Díaz's famous refrain—"Poor Mexico: So far from God and so close to the United States"—will lose its negative edge as collaboration between Mexico and the US deepens.

Yet as time has gone by and as energy markets rise, Mexico's auctions have improved. The country has been able to make very reasonable arrangements, and many of them are together in partnerships, in some cases with Pemex itself or with Mexican interests; still, many of these companies are now strong and have resources and technologies that are particularly useful when it comes to developing deepwater crude oil and natural gas. Royal Dutch Shell took nine of the nineteen exploration and exploitation rights, four on its own, four more with Qatar Petroleum International, and one with Pemex. It was indicated that Shell's particular interest was its experience in the Gulf of Mexico. While there was some nervousness at the newly elected leftist Andrés Manuel López Obrador in these auctions, the auctions' success may likely keep these oil resources flowing. As Energy Secretary Pedro Joaquín Coldwell commented confidently to Reuters, "Mexico is no longer a country where a single person makes a decision.... These contracts are fully protected." 56

Although the election of López Obrador signalled a return to the view of energy as a common good that was characteristic of the Mexican Revolution, the new president, despite his earlier opposition to the energy reform, soon pledged not to make any sudden changes. Even the advent of the presidency of Donald Trump, whose hostility toward Mexico led to the renegotiation of NAFTA into the newly styled Canada-United States-Mexico Agreement, did not lead to decreased interest in Mexican oil among US companies. The falling price of oil rather than the personalities involved structured business decisions by industry. By contrast, Venezuela has collapsed politically, taking its petroleum problems with it. Argentina, looking at neoliberal possibilities, gradually privatized its

oil industry between 1989 and 1999; by trying to restructure YPF as a private firm, Spanish company Repsol was able to take it over and then began to restructure and disinvest; Argentina had to renationalize in 2015 (see Serrani in this volume). Other Latin American countries are also beginning to use petroleum auctions. Brazil began several international offshore rights auctions underneath its salt flats in 2018 (on Brazil's salt flats, see Gail D. Triner in this volume). Meanwhile, though some old problems in Mexico's petroleum industry—such as pollution, corruption, theft, and inefficiency—are still around, its new players will be exploring and then producing. Pemex itself will pursue new investment strategies, seeking more business-directed means and including partners "to make money." Mexico has moved past article 27, and oil has been taken "outside the Constitution."⁵⁷

NOTES

Robb Corrigan, a London-based communications consultant, served as advisory editor for this chapter. Mr. Corrigan previously had been a business journalist in Mexico City. Throughout the chapter, I have focused on a series of articles by Carlos Navarro of *SourceMex*, in the University of New Mexico's excellent series Latin America Digital Beat (LADB, formerly known as Latin America Data Base), available at https://digitalrepository.unm.edu/sourcemex_pub/.

- See the complete discussion of the formulation and adoption of article 27 in Linda B. Hall, *Alvaro Obregón: Power and Revolution in Mexico, 1911–1920* (College Station: Texas A&M University Press, 1981), 179–83, and the discussion in Hall, *Oil, Banks, and Politics: The United States and Postrevolutionary Mexico, 1917–1924* (Austin: University of Texas Press, 1995), 3.
- 2 Hall, Oil, Banks, and Politics, 27.
- 3 Suggestions of Subjects to Be Covered in Proposed Memorandum, United States National Archives 812.6363/1231. This is one of a set of documents organized under this number with the general title "Committee of Oil Executives Documents on Conferences, August–September 1921" submitted by the committee to the State Department. (National Archives hereafter cited as "NA" plus document number.)
- 4 Minutes of the First Conference, 30 August 1921, Minutes of the Fifth Conference, 3 September 1921, Minutes of Sixth Conference, 3 September 1921, NA 812.6363/1231.
- 5 Luis Montes de Oca to Obregón, 13 January 1921, Fideicomiso Archivos Plutarco Elías Calles y Fernando Torreblanca 130110201, 27/23 (hereafter cited as "Archivo Calles Torreblanca" plus document number). Although the evidence for this request is uncorroborated by material from other sources, it seems likely that it was authentic. We

know that Fall needed money at this time and that he took bribes of similar amounts for the leasing of the Naval Reserves in Teapot Dome and Elk Hills shortly thereafter from two major US oilmen involved in Mexico. See Burl Noggle, *Teapot Dome: Oil and Politics in the 1920s* (Baton Rouge: Louisiana State University Press, 1962), 16–19. Fall definitely seems to have been in financial difficulty, even haggling over the rate for his hotel room in Washington. See C. V. Safford to Fall, 10 January 1921, 106 (1) b. Albert B. Fall Papers, Huntington Library (hereafter cited as "FA" plus document number).

- 6 Secretaría de Relaciones Exteriores, "Controversia sostenida entre los gobiernos de México de los Estados Unidos, con motivo de la reanudación de las relaciones diplomáticas," and accompanying documents, Fondo Álvaro Obregón, Serie Relaciones Exteriores para el Reconocimiento del Gobierno, exp. 109, foja 142, Fondo Reservado, Archivo Calles Torreblanca. These papers were among those considered especially sensitive by the Obregón and Calles administrations and were kept in a locked safe in the office of Fernando Torreblanca, private secretary to the two presidents. The safe was opened several years ago in the presence of a number of Mexican scholars and archivists to preserve the integrity of the documents after Torreblanca's death. Unless noted, the discussion that follows is based on the introductory document and the fifteen shorter memoranda included. These are hereafter cited as "Controversia."
- 7 George Baker of <u>Energia.com</u> and Mexico Energy Intelligence has been consulting government and business in Mexico as to the use of different terms refigured by for petroleum laws, public relations, etc. He also provides a regular byline in *Milenio*. A recent example is his "Filología comparativa," 8 June 2015, http://www.milenio.com/opinion/george-baker/la-energia-de-baker/filologia-comparativa.
- The certified minutes of the meeting were published in *Proceedings of the United States-Mexican Commission Convened in Mexico City, May 14, 1923* (Washington, DC: Government Printing Office, 1925). A Spanish translation is available in Aarón Saénz, *La política internacional de la Revolución: Estudios y documentos* (Mexico City: Fondo de Cultura Económica, 1961), 374–443.
- 9 Hall, Oil, Banks, and Politics, 149.
- Summerlin to Hughes, 3 September 1923; Phillips to Summerlin, 4 September 1923, Papers Relating to the Foreign Relations of the United States, 1923 (Washington, DC: Government Printing Office, 1938), 2:555-67.
- 11 For example, see José Dolores, "Se acabarán o complicarán los problemas del campo mexicano," in *El Sol de Texas* (Dallas), 12 December 1991. In the article, Dolores complained that Salinas had bought off the "agrarian leaders . . . going against the ideas, sentiments and desires of their own bases."
- Steven Ranieri, "On Proposals to Privatize Ejido Lands," SourceMex, 16 October 1991; Ranieri, "Chamber of Deputies Approves Constitutional Modifications regarding Land Tenure," SourceMex, 18 December 1991.
- 13 Carlos Navarro, "Governing Party, Center-Left Opposition Offer Plans for Energy Reform," SourceMex, 28 August 2013.
- 14 Carlos Navarro, "President Vicente Fox Names Four Corporate Executives to Board of State-Run Oil Company Pemex," SourceMex, 21 February 2001.

- 15 Carlos Navarro, "President Vicente Fox Considers Withdrawing Nomination of Four Corporate Executives to Pemex Board," SourceMex, 28 March 2001; "Mexico: President Fox Creates Advisory Committee for Pemex," BBC News, 9 May 2001.
- 16 Carlos Navarro, "President Vicente Fox's Administration under Fire for Secret Concession to U.S. Energy Company to Construct Gas Plant," SourceMex, 3 March 2004.
- 17 Navarro, "President Vicente Fox's Administration under Fire; Navarro, "Chamber of Deputies Votes against Pursuing Constitutional Challenge to Multiple-Services Contracts," SourceMex, 21 April 2004; Navarro, "Mexico and Russia Reach Energy-Related Agreements during Visit of President Vladimir Putin to Mexico," SourceMex, 16 June 2004; Navarro, "Mexico Joins Mercosur as Associate Member," SourceMex, 4 August 2004.
- 18 Carlos Navarro, "Government Launches Operation to Crack down on Fuel," SourceMex, 10 March 2004; Navarro, "Pemex Director Raúl Muñoz Leos Resigns under Pressure," SourceMex, 3 November 2004.
- 19 Carlos Navarro, "Government Fined Six Former Pemex Officials for Diverting Funds to PRI Presidential Race in 2000," SourceMex, 18 May 2005.
- 20 Carlos Navarro, "Congress Overwhelmingly Approves Legislation to Reform State-Run Oil Company Pemex," SourceMex, October 29, 2008.
- 21 Carlos Navarro, "Supreme Court Validates Private Contracts for State-Run Oil Company Pemex," SourceMex, 15 December 2010.
- 22 Carlos Navarro, "President Felipe Calderón, Center-Left Opposition Parties Differ on Energy Policy, State-Run Oil Company Pemex," SourceMex, 7 April 2010.
- 23 Carlos Navarro, "Mexico's Ranking on Transparency International's Corruption Index Worsens in 2010," SourceMex, 3 November 2010.
- 24 Carlos Navarro, "State-Run Oil Company Pemex Awards First Exploration Contracts to British, Mexican Companies," SourceMex, 24 August 2011.
- 25 Carlos Navarro, "Center-Left Candidate Andrés Manuel López Obrador," SourceMex, 19 September 2012.
- 26 Carlos Navarro, "In Dramatic, Low-Risk Move, President Enrique Peña Nieto Orders Arrest of Teachers' Union President Elba Esther Gordillo on Corruption Charges," SourceMex, 6 March 2013.
- 27 Carlos Navarro, "Huge Explosion Rocks Administrative Headquarters," SourceMex, 6 February 2013.
- 28 Lauren Villagran, "Long a State Monopoly, Mexico's Oil Sector Moves to Embrace Outside World," Christian Science Monitor, 13 August 2013.
- 29 Navarro, "Governing Party, Center-Left Opposition."
- 30 Navarro, "Governing Party, Center-Left Opposition."
- 31 Carlos Navarro, "Center-Left Parties Pushing for Public Referendum," SourceMex, 16 October 2013.

- 32 "Perfil de Joaquín Hernández Galicia. La Quina," *Excelsior*, 11 November 2013, www. excelsior.com.mx/nacional/2013/11/11/928036.
- 33 Carlos Navarro, "Center-Left Party Withdraws from Pacto por México," SourceMex, 4 December 2013.
- 34 "Oil and Energy Reform in Mexico: An Interview with George Baker," Mexidata.info, 4 November 2013.
- 35 Carlos Navarro, "Congress Easily Approves Energy Reform Plan," SourceMex, 12 December 2013.
- 36 Carlos Navarro, "Pemex Contractor, Mexico's Largest Bank at Center of Major Financial Scandal," SourceMex, 19 March 2014.
- 37 Carlos Navarro, "New Law Sets Specific Rules for Citizen Consultations," SourceMex, 19 March 2014.
- 38 Carlos Navarro, "Award-Winning Mexican Director Challenges President," SourceMex, 7 May 2014; "10 preguntas del ciudadano Alfonso Cuarón al Presidente Enrique Peña Nieto," La Jornada, 28 April 2014; "Alfonso Cuarón hace última pregunta de Peña Nieto," Regeneración, 5 May 2015.
- 39 Carlos Navarro, "Congress Approves Secondary Laws to Implement Energy Reforms," SourceMex, 6 August 2014.
- 40 "En dos horas, PRI y Pan aprueban dictámenes de la reforma energética," La Jornada, July 16, 2014.
- 41 "Camacho y Madero celebran 'triunfo del consenso,' "La Jornada, 12 August 2014, and "Videgaray: En cinco aõs Pemex tendrá una 'reducción histórica' en su carga fiscal," La Jornada, 12 August 201. The Spanish text reads, "reducción histórica... debido a que habrá más participantes en la industria invirtiendo y extrayendo hidrocarburos." Ley del Fondo Mexicano del Petróleo para la Estabilización y el Desarrollo, Diario Oficial de la Federación, Nueva Ley DOF 11-08-2014, 11 August 2014, http://archivos.diputados.gob.mx/Comisiones_LXIII/Vigilancia_Auditoria/Normas/14.pdf.
- 42 "Mexico Outlines Plan to Open Oil Fields to Private Companies," Wall Street Journal, 13 August 2014.
- 43 "Mexico's Pemex Adjusts Structure to Compete with Private Companies," Wall Street Journal, 20 August 2014.
- 44 "Mexico's Pemex Looks to Tap U.S. Shale," Wall Street Journal, 13 August 2014.
- 45 Carlos Navarro, "Mexico Announces Budget Cuts in Response to Global Slump," SourceMex, 4 February 2015.
- 46 "Mexico Ramps Up Search for Private Oil Investment," New York Times, 14 March 2015.
- 47 "Mexico Ramps Up Search for Private Oil Investment," New York Times, 14 March 2015.
- 48 "Oil Companies Show Active Interest in Mexican Energy Tracts," Wall Street Journal, 1 April 2015.

- 49 "Energy Industry Investment Expected to Start Flowing into Mexico in Late 2015," EFE News Service, 6 May 2015.
- 50 Jude Weber, "Oil Company Pemex Has Biggest Exploration Success in 5 Years," Financial Times, 11 June 2015; Andy Tully, "Could This Trigger a New Oil Boom in Mexico?" Oilprice.com, 14 July 2015, https://oilprice.com/Latest-Energy-News/World-News/Could-This-Trigger-A-New-Oil-Boom-In-Mexico.html.
- 51 Michael Davis, global financial adviser, text message to the author, 16 July 2015; Carlos Navarro, "The First Auction of Oil Fields under New Energy Privatization Scheme Draws Little Interest," SourceMex, 22 July 2015.
- 52 "Mexico Sweetens Oil Auction to Draw Firms Hit by Low Oil Prices," *Wall Street Journal*, 26 August 2015.
- 53 "Mexico Gets Stronger Demand in Second Oil Auction," Reuters, 30 September 2015.
- 54 Michael Davis, global financial adviser, email to author, 14 June 2015.
- 55 "Mexico Expects Same Treatment as Canada under NAFTA—Hydrocarbons Official," BBC Monitoring, 10 April 2015; Blake Clayton, "The Case for Allowing U.S. Crude Oil Exports," Policy Innovation Memorandum No. 34, Council on Foreign Relations, 8 July 2013; Daniel Fine, "Energy Magazine," Daily Times (Farmington, NM), 18 April 2015.
- 56 Carlos Navarro, "Mexico Holds Successful Auction for Deepwater Reserves," SourceMex, 4 February 2018.
- 57 "Oil and Energy Reform in Mexico: An Interview with George Baker," Mexidata. info, 4 November 2013; "Mexico's Pemex Adjusts Structure to Compete with Private Companies," Wall Street Journal, 20 August 2014.