



THE RULE OF LAW AND MEXICO'S ENERGY REFORM

Coordination of the Regulators of the Hydrocarbon Sector:
Is It Optimal for the Rule of Law?

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About the Study: The Rule of Law and Mexico's Energy Reform/Estado de Derecho y Reforma Energética en México

The 2013 changes to the constitutional framework and the summer 2014 enabling legislation in Mexico's energy industry represent a thorough break with the prevailing national narrative as well as the political and legal traditions of twentieth century Mexico. Mexico is about to embark on an unprecedented opening of its energy sector in the midst of important unknown factors, as well as a fiercely competitive and expanding international energy market. Mexico is one of the last developing countries to open its energy sector to foreign investment, and although there are important lessons that can be learned from other countries' experiences, this does not imply that the opening will be necessarily as successful as the government promises or that the implementation of the new laws will go smoothly. Almost certainly, after the enabling legislation goes into effect, important questions of law will emerge during the implementation, and unavoidably, refinements to the legislation will have to take place.

The book "Estado de Derecho y Reforma Energética en México," published in México by Tirant lo Blanch and written in Spanish, is the culmination of a major research effort to examine rule of law issues arising under the energy reform in Mexico by drawing on scholars and experts from American and Mexican institutions in order to bring attention to the different component parts of the new Mexican energy sector from a legal standpoint.

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Introduction

The institutional arrangement of the hydrocarbons reform 2013 in Mexico cannot be understood without analyzing the design and the basic position of its industry regulators, in this case the National Hydrocarbons Commission (CNH) and the Federal Energy Regulatory Commission (CRE).¹ As soon as the political commitment was made to open the oil and gas industry up to private investment, the consideration of the regulators' design and capacity to set up a new industry could no longer be delayed. Until the time of the reform, the industry had acquiesced to some small regulators that were attached to the Ministry of Energy (SENER) as decentralized bodies and possessed a portfolio of legal competencies that, although not immense, have not been fully performed due to budgetary and human resource limitations. Considering these circumstances, Mexico's hydrocarbon regulators required improved conditions both in terms of their legal design as well as of the availability of human and economic resources.²

The limited role of the regulators and their related weakness is particularly noteworthy with respect to the enormity in size and power of the companies that they regulate. Before the reform, since its establishment in 1995 the CRE has had a maximum number of officials of around 200 that are still concentrated in Mexico City, whereas PEMEX GAS (PGPB) had thousands of employees scattered throughout the country. In its capacity as a company regulated by the CRE, PGPB was joined by other large-scale companies that are mainly natural gas transporters and distributors.³ These companies, which also operate in the most remote locations of the country and have thousands of kilometers of pipelines and areas of distribution,⁴ must be subject to technical supervision by the CRE, which still has scarce human capital with training in engineering or related professions.⁵ Considering this disproportion in numbers and in presence between the CRE and regulated companies, and given the lack of studies that evaluate and determine its efficiency, it can be assumed that the regulator's technical control capacities are compromised.

In contrast, the CNH is a newer regulator that was created under different circumstances. Here, it is important to point out that the CRE is a body whose establishment was motivated by an opening and by an increase in the number of players.⁶ The CNH, in turn, emerged with the uncomfortable role of regulating the operations of PEMEX Exploración y Producción (PEP), Mexico's formerly exclusive operator. During the 2008 reform process, the idea arose of creating an entity that would monitor certain technical issues related to the exploration and exploitation of hydrocarbons without PEP losing total exclusivity over petroleum operations. However, in an environment without any competition, it was reasonable to ask how pertinent the creation of more bureaucracy would be for the industry when the CNH's powers could instead be exercised by the Ministry of Energy itself.⁷ Beyond being technical review authorities, hydrocarbons regulators should be forces ordering the market in the areas of exploration and production and encouraging competition between different companies. Given PEP's exclusivity, the CNH was impeded from carrying out the main functions of its peers worldwide. In a competitive industry, the entry or replacement of a less efficient company by one that is

more efficient is an important incentive for compliance with the regulatory framework. In the words of Josefina Cortés, the CNH was a “regulator for a single regulated company.”⁸

However, the 2013 reform would pave the way for many more companies to be regulated, by the CRE as well as the CNH. These companies will not only have to face two great powers, but rather many more. This time, they will no longer be state-owned energy giants, but rather other companies whose direction and interests will be foreign, and maybe even contrary, to those of the Mexican state. The new Mexican energy arena is already open to private and public companies whose commercial (and political) agenda might be, at least up to a certain point, indifferent to that of Mexico, with all the implications that this may have for their operations within the country. Considering these circumstances, the debate regarding the legal and institutional re-creation of the regulators had to take place simultaneously with that addressing the opening of the oil and gas industry.

The purpose of this paper is to conduct a legal analysis of the new model of the hydrocarbon regulatory bodies in Mexico. The subject matter of this study is therefore the so-called “coordinated regulatory bodies,” which was articulated in Article 28 of the Constitution at the time of the December 2013 reform and seems to be somewhat similar to the National Council of Energy Policy created by the Brazilian Hydrocarbons Act.⁹ This similarity notwithstanding, “regulative coordination” is typical of the Mexican legal system and its introduction was more the result of improvisation than of willingness to implement a strict technique of institutional design. As will be shown below, the political agreements forged “coordination” as an intermediate scheme between the constitutional autonomy granted to the Federal Institute of Telecommunications and the Federal Antitrust Commission and the much criticized administrative deconcentration. The first of these appeared to provide excessive autonomy to the regulating bodies of the energy sector, an industry that up to that point was fully controlled by the public administration, while the second was considered very insufficient for the same reason.

After reconstructing the history of how this typically Mexican form came about, it will be possible, by understanding its design and assessing some of its competencies, to draw preliminary conclusions on how functional and necessary it might be in the future. Here, it is important to underscore that these conclusions are highly speculative due to the fact that the implementation of the reform is still at an embryonic stage.

One of the main aspects that will be addressed by this study is an assessment of whether the new coordinating structure helps to build an industry in a country with proper governance and rule of law. As broad as the different meanings of this term may be, we have elected the rather narrow definition of “rule of law” provided by attorney and scholar Thomas Wälde, which refers to the capacity of the rules and organizations to provide legal certainty both for the old and new players in the industry.¹⁰ The legal security of the new players must be one of the bases for the regulators’ decision-making processes. In this regard, Wälde’s concern has focused on whether the law and the organizations that apply it are sufficiently solid to withstand the forces that could often compromise the soundness of their decisions. Therefore, the assessment of the “coordinated regulatory bodies” will be

carried out in light of the following question: through its new structure, have the regulators been strengthened with the means to issue stable contracts, ensure fair bidding rounds, and avoid bottlenecks in order to facilitate competition? A negative answer could significantly affect sustainable openness and should lead to a new public policy proposal. However, this chapter puts forth the following conclusion: coordination that is properly articulated between the regulatory bodies is very conducive to fostering the success of the new model under the conditions that will be discussed at the end of this paper.

The Debate: From Constitutional Autonomy to Coordination

The dismantling of state monopolies would only have meaning with respect to regulators that are capable of opening a “fair” entrance for public and private companies, both domestic and foreign. Unlike the CRE, which had already regulated private companies since the opening of the natural gas market in 1995, the CNH has only just begun to deal with companies other than PEMEX. To date, the first three calls for bids for Round One have been published,¹¹ and the CNH has only had experience “regulating” PEP mainly through establishing technical standards pertaining to industrial safety and the sale of gas, issuing nonbinding opinions regarding the assignments granted to it, and validating domestic reserves.¹²

However, beyond the field of energy the context of the national debate surrounding the relationship between regulators and regulated companies and between the former and other public bodies can be seen. The reform that affected the telecommunications sector and the regulation of antitrust policy established some of the scenarios that would have to be considered when analyzing activities in the energy sector. By channeling one of the first structural reforms enshrined in the Pact for Mexico, the administration of President Enrique Peña Nieto identified the common denominator among political trends:¹³ the public’s aversion to monopolies that result in abuses of the user, and the generalized perception that the harshness of the former was the result, to a large degree, of an insufficient regulative design. The fragility of regulators not only in relation to de facto powers, but also with respect to other levels of government, caused the suffering of the users.

Therefore, during the months of debate on the first structural reforms, the political discourse focused on condemning the strength of monopolies and pointing out the regulators’ weakness. In the midst of this interplay of forces in which regulators had been minimized, users remained trapped, held hostage by poor and costly services. Thus, the parties would have had to rein in the abuse through the “empowerment” of the regulators with respect to the telecommunications and broadcasting giants. Despite the fact that it was a very complex discussion, the conclusion was simple and Manichaean: “Monopolies are bad and regulation is good.”¹⁴ This was the political banner for the reform of competition, telecommunications, and radio broadcasting.

Once the constitutional reform in the aforementioned fields and the secondary laws had been approved, the government, already opposed by the PRD, was preparing to question the functionality of another sector in which were regulators and two so-called monopolies.¹⁵

However, in contrast with the preceding case, PEMEX's problems could not be attributed exclusively to a weak regulatory system. Within the energy sector, exclusivity was based on three constitutional articles that appeared to be dogmas of faith more than legal standards. As popular as it was to revile the private monopolies of telecommunications and radio broadcasting, it was just as difficult to do so with the public ones. Based on their dual character as a company and an entity of assistance,¹⁶ denouncing PEMEX's abuses against its users presented complexities in political strategy and social communication.

This was the case because unlike the telecommunications empires, whose services and rates were characterized as abusive, part of PEMEX's woes are due to the fact that it had to carry the burden of Mexicans for many years, whether by covering the tax shortfall left by non-compliant taxpayers or through price controls for fuel. Different studies on the beneficiaries of controlled fuel prices showed that they benefit the highest decile of the population.¹⁷ Based on this context, if PEMEX was seriously damaged, it was because it was carrying those who did not even need assistance. In view of this situation, the positions hardened. Some were saying to let PEMEX charge what is fair, so that it could reinvest its revenue and be efficient. However, others argued that without competition and regulation, PEMEX would never be efficient.¹⁸

In the case of exploration and production, the proposal to strip PEMEX of its exclusivity touched on even more sensitive areas, since it was necessary to argue the dysfunctional nature of PEMEX being the only provider of petroleum and the resulting revenue. The radical nature of the proposal was based on the debate as to whether it was advisable to share the oil-based "economic rent," which has been the country's main source of tax revenue and of funding for many social programs. Therefore, a quantum leap in the political discourse consisted of communicating that PEP would no longer be the sole provider of petroleum wealth, but rather a player among peers. The great challenge was to convincingly communicate that competition in exploration and production would have a positive impact on Mexico and also on PEP, which would need to prepare for the "Iron Man" after having rested on its laurels for decades. Therefore, within the new scheme, PEMEX would have to engage in the same efforts as any other company to become a competitive provider of oil for Mexicans and for the international markets. From the reform onward, it would be its implementation capacity and not its constitutional foundation that would keep PEMEX as an important operator in the Mexican subsoil.

Moving PEMEX to the center of the value chain made it necessary to reorganize the regulatory bodies. In its July 2013 initiative, the National Action Party (PAN) was the first to transplant a competitive model for the hydrocarbon industry taken mainly from Colombia and Brazil.¹⁹ The proposed wording of Articles 25, 27, and 28 of the Constitution broke the already fragile levees of the so-called "strategic areas."²⁰ From the opposition party, which was unable to finalize even a much more limited reform in 2008, came a proposal echoing the reforms of Norway, Colombia, and Brazil, which were more ambitious.²¹ Using these reforms as references, PEMEX's dominant position would be assumed by the "nation," which would distribute the contractual areas of exploration and production among the most fitting companies and would go on with the construction and operation of refineries,

oil pipelines, polyducts, and other infrastructure associated with the distribution and trading of hydrocarbons. Under the PAN proposal, the road from the well to the wheel was stripped of any barriers to private participation.²²

However, the fact that the nation was opening up did not mean that there would no longer be any transit authority. Rather, someone would have to patrol both the upstream and downstream sectors.²³ For exploration and production activities, the CNH would continue to be the regulator, with a diversification and increase of powers and of companies it regulated. In turn, the CRE would be in charge of regulating activities such as the transportation, storage, and distribution of all hydrocarbons and petrochemicals without being limited to natural gas, as it had been up to that point. By significantly increasing the regulators' workload, it was foreseeable that both the academic and industrial sectors would start reflecting on the limitations imposed on these regulators within their respective mandates.²⁴

Similar to what happened in the telecommunications sector, criticism of the energy industry regulators was particularly related to their lack of autonomy, even though the CRE and the CNH had their own laws²⁵ and their own set of powers allowing them to issue resolutions—at times controversial²⁶—that could not be appealed by the Ministry of Energy. Even within the framework for administrative deconcentration, in which regulators were ascribed within the Ministry of Energy, the technical and managerial autonomy provided by their laws gave them a certain measure of freedom of to act according to their own criteria.²⁷ Nonetheless, the command structure of the energy sector made it very difficult for industry regulators to freely make decisions that many times were repellent to state-regulated entities.

Prior to the 2013 reform, both the CRE and the CNH were deconcentrated bodies of the Ministry of Energy whose greatest protection were the laws that had established them and that gave them technical and administrative autonomy.²⁸ However, they continued to be attached to this ministry, which prevented them from preparing and having their own budget. Therefore, the exercise of the powers assigned to both institutions by these laws was decidedly restricted by the budget that the ministry decided to allocate to them. On the other hand, prior to the 2011 constitutional reform, which approved the ratification of the regulatory bodies' commissioners by the Senate, their designation depended entirely on the proposal submitted by the Ministry of Energy to the President of the Republic.²⁹ Therefore, the commissions were linked, to some degree, to the minister in office and even to the president, which could compromise some of its most important decisions.

An important structural aspect that has affected the CNH and the CRE's capacity to regulate PEMEX has been the status of the Minister of Energy as president of PEMEX's board of directors. Even though the minister is not hierarchically superior to the CRE and CNH commissioners, the degree of his or her political influence over them has had an impact on some of their decisions. It is dysfunctional that someone who dictates a policy of regulation is simultaneously the president of the board of a company being regulated.³⁰ This double function of the minister has, at times, rendered the regulators' resolutions pointless and has even caused indecisiveness in terms of the implementation of its policies.³¹

Based on this assumption, the PAN initiative proposed that the regulatory bodies of the energy sector would follow the same route as those for telecommunications and competition.³² This means that the PAN put constitutional autonomy of the regulators on the negotiating table. They would be immune to pressure both from PEMEX itself as well as from other cabinet members, including the minister of energy. Likewise, they would have budgetary autonomy and could finally increase their staffing level and their contracting of specialized consulting. Such an opening would entail an exponential increase in their tasks; it was therefore imperative to guarantee the budget and human resources so that they would be able to be fulfilled.

The PAN proposal reflected the correct assessment that after 76 years of a pathological endogamy between PEMEX, SENER, the CRE, and the CNH, it was necessary to create sufficient institutional distance for each of these entities to fulfill its role. In this way, SENER, as the head of the sector, could not disrupt decisions made by the regulators, and PEMEX could not evade regulatory action through SENER.

However, once the draft of the constitutional reform initiatives was issued and in the absence of a PRI proposal for a regulatory model, it was resolved that constitutional autonomy was not a suitable model for the new bodies. Some of the more lucid reflections are due to Dr. José Roldán Xopa, who, in stating the reasons for constitutional autonomy, discarded the notion that such autonomy was suitable for the performance of the regulators' tasks.³³ Roldán argues that regulatory action is mainly an accumulation of administrative functions and that, for the same reason, these bodies tend to be attached to the public administration with a legal architecture protecting them against political pressure.³⁴ However, since they remain within the public administration, they are subject to the planning instruments originating from it.

In terms of the establishment of an autonomous constitutional body to regulate telecommunications, Roldán's criticism is right on the mark. As instruments created by the executive branch of the federal government, in a strict sense neither the National Development Plan nor the energy sector's program would need to be followed by a body of this nature. The same would be the case in the energy sector. Had the CRE and the CNH been recreated as autonomous constitutional bodies, their actions would not need to follow the provisions in the National Development Plan, the Energy Industry Plan, or the different national energy strategies. This could create important gaps, not only in terms of implementation, but also in the very design of public policies. Furthermore, the transition from a model with intense interference from the government in everything concerning the sector to one where regulators would become untouchable was politically and functionally unviable. Shielding the energy sector regulators in such a manner would have meant giving them a role of utmost power at a very delicate point in the consolidation of the reform. Without a doubt, the opening of hydrocarbon activities required autonomy for the regulators, since it would be important to send the correct signals to the markets. However, the fragmentation of the sector was a possibility that could result from the establishment of autonomous constitutional bodies.

Therefore, the challenge for the parties was to find middle ground for the regulators between the already outdated administrative deconcentration and the newly implemented constitutional autonomy for other regulators, which was deemed inappropriate for the energy industry. The legislative debate determined that although the regulators needed some separation to be free to make technical decisions regarding the sector, excessive distance could cause serious coordination problems with the remainder of the government.³⁵ Therefore, the idea of leaving the regulators outside of the radius of the federal government was losing force and drive as the constitutional reform was being drafted.

Against this background, the solution devised by the PRI and the PAN in the draft submitted on December 20, 2013 turned out to be a model without any precedent in the international industry. The text of Article 28 of the Constitution created the “coordinated regulatory bodies” whose meaning and implications would not be clarified until April of the following year, when the initiatives of the secondary laws regarding energy matters were issued. The draft of the Coordinated Regulatory Bodies Law, approved by both chambers of the legislature the same year, shed more light on the recently coined term in Article 28 of the constitutional text.

According to the Constitution, regulatory coordination is limited to the CRE and the CNH; their function is the orderly establishment of a new industry model, whose new and most noteworthy characteristic is competition along the entire value chain of hydrocarbons. This means that within their expanded sphere of power, the main task of these regulators is to restructure the hydrocarbon and electricity industries through an increase in investment, innovation, and efficiency in both fields of activity within a competitive environment.³⁶ As far as hydrocarbons are concerned, the CNH would, among other tasks, be in charge of launching exploration and production contracts in international markets for companies other than PEMEX to participate in the increase of reserves and production of hydrocarbons at the lowest possible cost and with the greatest economic participation of the state. This is intended to ensure domestic supply and maximize petroleum revenue.³⁷ In turn, the CRE would be responsible for the regulation of very different activities: regulating the prices of some hydrocarbons, oil, and petrochemicals; establishing rates for their transportation, storage, and distribution; designing contracts; and granting related permits.³⁸

In sum, the law establishes that the coordinated regulatory bodies remain attached to the federal government. Without being properly decentralized agencies, they share certain attributes such as legal personality; increased budgetary, technical, and managerial autonomy; and the possibility of collecting income through the duties paid for the administrative processes they carry out. The budget issue and the withholding of income from the payment of fees represent a substantial improvement for these bodies, which used to be exclusively funded by the Ministry of Energy.³⁹

Therefore, the general characteristics of these bodies are the following:⁴⁰

- Both the CNH and the CRE have a governing body made up of seven commissioners, including the chairperson, in addition to a technical secretary.
- The commissioners are appointed as follows: the executive branch proposes a list of three names for each office, one of which is selected and ratified by the Senate and can be removed from office only in the case of faults set forth in the law.

In addition to those vested in them by the Hydrocarbons Act, the general powers of both regulatory bodies are the following:

- To issue instruments of regulation for the activities within their jurisdiction.
- To approve their own budgets, which will be sent to the Ministry of the Treasury for approval by Congress.
- To submit technical information to the Ministry of Energy and to any other agency for the preparation of the National Development Plan and the Industry Program.
- To direct and prepare technical studies for matters within its jurisdiction.

In particular, the CNH remains the regulating body of the “upstream” side of the domestic hydrocarbon industry and carries out the following functions:⁴¹

- Regulates and supervises the exploitation and extraction of hydrocarbons, which is its fundamental purpose.
- Promotes, awards, and carries out the exploration and production contracts as well as the petroleum assignments⁴² held by PEMEX.
- Supervises exploration and production projects to guarantee optimal recovery.
- Promotes the restoration of reserves as the basis for national energy security.
- Ensures the use of the best technology for the exploration and extraction of hydrocarbons.
- Establishes the nation’s hydrocarbons information center.

On the other hand, the objectives of the CRE are the following:⁴³

- To regulate and promote efficient operation of the transportation, storage, distribution, compression, liquefaction, and regasification of hydrocarbons, as well as their sale to the public.
- To regulate the transportation, storage, and sale of biofuels.
- To promote the safe, stable, and efficient supply of energy resources.

So far, the description of the regulatory bodies has not yet made any reference to their greatest peculiarity: the fact that they are both subject to the so-called “Coordinating Council of the Energy Sector,” which is presided over by the minister of energy and composed of the presiding commissioners of both the CNH and the CRE, the deputy ministers of the sector, and the general directors of the National Energy Control Center and the National Gas Center.⁴⁴

The law also lists the functions of said council, among which the following are noteworthy:

- To inform the regulating bodies of the “energy policy” set forth by the ministry.
- To issue recommendations that, in matters of energy policy, may include the regulatory bodies in their work programs, and in turn, to analyze the proposals of said regulatory bodies in matters of energy policies and programs.
- To analyze specific cases “that may affect the development of the public policies of the executive branch in energy matters and propose coordination mechanisms.”

This council is the channel through which the Mexican legislation chose to embody the coordination in its entirety, although its significance or efficacy is not entirely clear. What does it mean that this council is a space of knowledge for regulators in matters of energy policy, assuming that this is something that could be specified in a council? On the other hand, how will the analysis of specific cases be conducted and what will be the methodology used? What will the purposes of this analysis be? The same issue applies to the issuing of recommendations, which is utterly generalized in the law. From this perspective, the significance of the constitutional innovation designated as the “coordinated regulatory body” cannot be discerned, even though coordination of regulatory bodies exists in other parts of the world and has contributed to improving the operating conditions of the industries.

However, it should be emphasized that the Ministry of Energy being the chairman of this council is at least uncomfortable—not necessarily because of his office as such, but rather because he is also the president of the board of directors of PEMEX, which puts him in an obvious conflict of interest. It is preoccupying, to say the least, that the coordinator of the regulators is the president of one of the largest companies they regulate and undoubtedly the most complex company to expose to competition. We will have to see if in the future, there are signs that the credibility of the regulators has been compromised by indicating some bias either in favor of or against PEMEX in their decisions. It is clear that this could occur with or without the leadership of the minister of energy on the council in question.

The New Platform of Regulation: A Space Shared Between Regulators

The “old” industry was based on two state-owned energy giants that were surrounded, on a secondary level, by some private companies that depended on them to some degree. In terms of hydrocarbons, PEP was beyond the scope of any regulator for many years, until the CNH was created in 2008. Oil exploration and production were activities exclusively reserved for PEMEX, as were oil transportation, storage, and trading. While exploration and production were regulated in a limited manner by the CNH, the transportation, storage, and trading of oil (and its derivatives) were subject to rules of self-regulation by PEP itself. Based on this state of affairs, in matters of oil, the formula was simple: the only entity producing, transporting, and trading oil was PEMEX through PEP and PMI, respectively.⁴⁵

Something different was happening with the gas sector, where the government had carried out a partial liberalization. While the exploration and production of domestic gas remained the exclusive domain of PEMEX, the import, transportation, storage, and distribution of gas were opened up to private investment. Therefore, in the industry, there were two spheres that hardly communicated on a regulatory level. On one hand, there were the extractive and industrial processes of oil and gas, monopolized by PEMEX and partially regulated by the CNH (in terms of extraction); on the other, there was a realm less regulated by the CRE. What is important to emphasize here is that these two spheres of regulation rarely ever came into contact and that coordination between regulators was therefore unnecessary. In practice, the simplicity of the industry model—due to the great concentration of activities in PEMEX—made comprehensive institutional coordination efforts unnecessary. If there was something to coordinate, it was perhaps sufficient to make calls between government offices.

The significant potential growth in the number of players involved in hydrocarbons activities put an end to the square formed by SENER, PEMEX, the CRE, and the CNH, where there was no significant communication between the latter two. The new legal framework created the room for many more players; thus, the powers of the regulators did not only multiply but also required a coherent and functional system. Without a doubt, this new scenario will require the authorities to become aware that increased communication and coordination between regulators is necessary. The inconsistency in the application of policies between hydrocarbon extraction projects and those involving their transportation, storage, and distribution might cause the industry to become disrupted.

So far, we have discussed the reasons for the establishment of the council, although we have not stated its risks. It must be remembered that the final version of the council was weaker than the initial proposal, in which it was not very clear whether the council's opinions were binding for the regulators.⁴⁶ When the first "coordination" outlines were prepared, they seemed to tend toward subordinating the regulatory bodies to the council, whose chairman is the minister of energy. This would have been contrary to the aspirations stated by the reformers of the Constitution to create more autonomous regulators. For this reason, the language that seemed to obligate the regulatory bodies to comply with the determinations of the council disappeared from the draft that was approved. Although it is evident that in Congress the balance was tipped toward autonomy of the regulators, it is not clear what function this new model of coordination of coordination is supposed to have. The imprecise language indicates a lack of maturity in the design of the coordination model, when it could be very useful for the effective materialization of the new organization of the hydrocarbon industry in Mexico. The model that was barely outlined in the constitutional text was not properly developed in the secondary legislation, even though—as we will see below—coordination between regulatory bodies is a trend that is increasingly recognized as a new way of designing the interaction between organizations with high degrees of specialization.

Regulated Autonomy: Beyond the Oxymoron

Unlike the autonomy of the regulatory agencies, their coordination has received little attention under administrative law. In Mexico's case, the autonomy of the energy sector's regulators especially concerns their capacity to create an environment of credibility for the general public and for investors in particular. This credibility must be fundamentally affirmed with respect to PEMEX and the CFE, which must be considered in their new status as just two more competitors within the energy sector. For this reason, the regulatory agencies must keep a distance from those who might have a direct interest in favoring the former monopolies, specifically including the minister of energy—who, as we have said, acts as the president of the Coordinating Council.⁴⁷ In this respect, coordination could be viewed as a threat to autonomy, although we have already stated in this paper that the regulatory design of the council's functions does not lead to major conclusions regarding the impact it might have on the autonomy of these bodies. As a matter of fact, the purpose that the coordination of regulatory bodies in Mexico strives to achieve is not clear.

In any case, coordination is an issue of organizational design that is receiving a growing interest in the specialized literature.⁴⁸ Coordination can ultimately improve the conditions of legal security in regulated sectors to the extent that it can contribute to “maximizing the strengths of the shared regulatory space” by reducing the risks of duplication fragmentation, and overlapping of these bodies' tasks. At the same time, this may work in favor of the regulators' functionality by increasing their effectiveness and efficiency, as well as the soundness of their decisions.⁴⁹

Coordination is especially desirable in an environment in which the specialization of regulatory bodies is continually increasing. This specialization has turned some regulators into closed containers without any communication channels between them.⁵⁰ We have already stated that both the CRE and the CNH existed in their own spaces with very little contact, since one regulated a sector that was under a monopoly, while the other was already handling the opening of the gas industry. We have also pointed out that as a result of the reform, there are no longer any exclusive areas of regulation and that the regulatory space resulting from the reform is unified and shared. The removal of exclusivity means the elimination of specialization of these bodies due to coordination, in which case coordination would no longer be compared to fragmentation. It should be added that according to the specialized literature, fragmentation resulting from a lack of coordination can negatively impact the equal treatment of regulated companies, due to the potential inconsistency between the decisions of one regulator and those of another. Moreover, fragmentation could also become a shield from responsibility, as the woes of the regulated companies (or users) might always be the fault of the “other regulator.” Finally, the absence of communication between regulators can lead to transaction costs for companies and “blind spots” in terms of the implementation of public policies.⁵¹

So far, we have argued that coordination as such may create many advantages, even with the risk that in specific cases, the autonomy of the regulators may be compromised. This happens especially in cases where the regulating bodies are coordinated in a compulsory

manner and through a centralized power. This would be the case in Mexico, considering that the regulatory bodies are coordinated by constitutional mandate and are under the leadership of the minister of energy. However, it is noteworthy that neither the law that regulates these coordinated regulatory bodies nor any other regulatory body of lesser standing precisely establishes more than one of the coordination mechanisms recommended by international practices, as detailed in Table 1.

Table 1. Coordination Mechanisms Recommended by International Practices

1. Procedural Mechanisms	2. Structural Mechanisms
Adoption of decisions issued vertically and unilaterally by a hierarchically superior authority, such as the minister of energy, who would have powers of veto and annulment.	Relocation of competencies (e.g., bring together or concentrate closely related competencies in a single body)
Compulsory/non-compulsory adoption of recommendations by experts.	Establishment of a hierarchically superior body to coordinate the entities.
Adoption of compulsory negotiation mechanisms.	Establishment of a body that is not hierarchically superior to coordinate the entities.
Joint decision-making mechanisms of the regulators.	Establishment of mechanisms for the exchange of information through databases.
Signing of institutional agreements.	Space for the non-compulsory consultation of experts.
	Decision platforms with processes that require approval by regulators participating in this coordination before being approved.

Regarding the mechanisms detailed in the above table, the following will be mentioned: the Coordinated Regulatory Bodies Law only includes “the establishment of a hierarchically superior body to coordinate the entities.” However, we have already argued that the meaning of this hierarchically superior body is not clear. On the other hand, Mexican law excluded the possibility for a higher authority to review or annul decisions by the regulators. In Mexico, where the discourse regarding autonomy has been fierce, this would be politically very unpopular, even though the *de facto* autonomy of regulators is constantly questioned.

The New Space of Regulation in Mexico: From the Well to the Wheel

In terms of the competencies of regulators, two of the most important for organizing and streamlining a market are the issuance of contracts and permits, as they will be the qualifying titles for new players in this area. We refer here to the CNH's role in the bidding for exploration and production contracts as well as the CRE's role in granting permits and setting rates for the transportation of oil, petroleum, and petrochemicals. The impact that the competitiveness of the contracts and the permits of the hydrocarbons sector will have on the entry of new players cannot be underestimated. Without exploration and production contracts that are able to guarantee a solid quantity and quality of operating companies, and without a policy of permits and rates that is transparent and commercially attractive, the new hydrocarbon industry in Mexico will only be developed with great difficulty. Moreover, it is of utmost importance that while promoting exploration and production projects, government players keep the conditions of the infrastructure to transport, store, distribute and market the hydrocarbons that are produced and/or industrialized in mind. To do so, there must be consistency between the policies of contractual preparation and of setting infrastructure rates.⁵²

In light of the foregoing, the Coordinating Council could be very useful to ensure that the contractual designs are in compliance with the policies for granting and pricing downstream infrastructure. Proper communication between the Ministry of Energy, the two regulators, and the independent operator for the transportation of natural gas would require opening channels for the proper integration of the industry into a coherent and functional system.⁵³ However, for this it is necessary to first understand the institutional framework involved both in the issuance of contracts as well as in the mechanisms for fixing permits and rates, as will be explained below.

One of the most notorious aspects of the 2013 reform was the change in the contractual paradigm. The reform radically expanded the type of petroleum contracts that could be offered in Mexico: it eliminated PEMEX as the only contracting entity and replaced it with the CNH. Until then, PEMEX had been designing the contracts, putting them up for bidding, and awarding them, in such a manner that it was both the party and administrator. Since PEMEX was the exclusive operator, its ubiquity in the contracting processes was significant, since it hoarded everything contracted by it. Nonetheless, the desire to increase operators in the country made it inconsistent to allow PEMEX to maintain control of the processes of contractual design, bidding, and administration. As a competitor, PEMEX would need to be kept on the sidelines of contractual procedures where it had been able to pull all the strings.⁵⁴

For this reason, the actions and decisions related to the issuance and awarding of contracts remained outside of PEMEX's control and were organized in the following manner: The technical and commercial design of the contracts are now carried out by the Ministry of Energy with the technical assistance of the CNH. In turn, the economic formula will be designed by the Ministry of Finance and Public Credit. As soon as the contract has been designed, it will be put up for bidding and will be awarded and administered by the CNH.⁵⁵

This division of competencies in contractual matters is atypical in the international industry and was justified in Mexico “as a system of checks and balances” to avoid having the contractual decisions reside within a single authority. However, it is questionable whether the different aspects of an oil contract need to be written by organizations whose power is clearly uneven and that respond to different incentives. There is no comparison, for example, between the force of the Ministry of Finance and that of the CNH.

Furthermore, due to its enormous influence over budgetary matters, it could be said that the former would be able to even crush the Ministry of Energy. Therefore, it appears that a system of “checks and balances” could in reality function as the submission of the drafters of the technical and commercial aspects to the fiscal authority.

If this were the case, Mexico could start its road toward the exploration and production market with contracts characterized by low commercial appeal, since it is not the role of a fiscal authority to create commercially attractive transactions. Furthermore, the goals pursued by SENER and the CNH are opposed to those of the Ministry of Finance. The former must attract investors so that Mexico can select the most efficient operators, whereas the latter, due to its nature, must focus on the collection of oil revenues. The former must look for companies that have the best performance in the restitution of reserves and production of barrels under the best conditions of technological progress, safety, and environmental protection. The latter is only interested in collecting oil rent. Therefore, a contract designed by separate entities—and for purposes that may be incompatible—might present serious problems of coherence and competitiveness in the market. In view of the foregoing, coordination within the above-mentioned council could serve as a space to reconcile these discrepancies.

Another important issue is the “political” nature of the Ministry of Finance vs. the “technical” profile of the regulators. In the case of Mexico, there has been a pattern of appointing ministers of energy who are strongly linked to the president, while possessing experience in the energy sector has hardly been relevant. Therefore, rather than achieving technical goals that might not contribute to political popularity, the main function of the different ministers of energy has been to carry out the intentions of the president. In turn, through the mechanisms of appointment and removal, the office of commissioner is more stable than that of the minister, considering that the latter can be appointed and removed by the president.

Within a delicate political context such as that of the hydrocarbons reform, we believe that the concentration of the jurisdiction over the contractual design within the Ministry of Energy could lead to inconsistency in the contractual models in the case of a change in minister or in the event that political or economic circumstances force the same minister to formulate different models. It would send a signal of inconsistency to the market, which would reduce the credibility of the reform and the rule of law in general in Mexico, if this credibility is understood as a set of predictable legal conditions.

The issue of permits and rates for midstream facilities primarily concerns the CRE. As a relevant precedent, the difficult role that the CRE had to play within the energy sector for

two decades in its capacity as the regulator of prices and rates for domestic natural gas is known. As such, the CRE has encountered resistance from PEMEX in implementing a specific “open access” policy, in which the latter would have to make its transportation infrastructure available to third parties even when the gas injected did not come from PEMEX. Since 1995, the CRE has had the very complicated task of the “vertical disintegration” of PEMEX Gas in a situation where it was dominant both in the provision of the gas itself as well as in gas transportation services. After twenty years of attempting to carry out this change, the regulator has not yet succeeded, and PEMEX has continued to own the gas and maintain control over the pipelines.⁵⁶

For this reason, the 2013 reform promoted the creation of an “independent operator” of the pipeline system called the National Gas Center (CENAGAS),⁵⁷ which must facilitate the task of the regulator—guaranteeing open access—by providing clear signals of the cost and availability of natural gas transportation in Mexico. In other words, the reform was intended to put an end to PEMEX’s dominance by eliminating its ownership of and control over the gas pipelines, so that anyone who requires the service can utilize available capacity. This is an important signal to encourage the entry of new gas producers, who must receive proper assurances that there will be transportation for their products or that they will be able to connect with the existing transportation system in order to reach centers of consumption.

For these reasons, CENAGAS is a part of the Coordinating Council of Regulators of the Energy Sector. The information that CENAGAS provides regarding the capacity and cost of natural gas transportation will be crucial for the development of new infrastructure. In sum, the new operator will be in charge of opening the “black boxes” that prevented access to the information that would, on one hand, permit “open access” to PEMEX’s pipelines, and on the other hand, provide knowledge of the costs for the construction and regulation of new infrastructure. This is expected to put an end to PEMEX’s dominance so that those who require transportation can use the already existing system⁵⁸ or construct and interconnect new networks without any threat from PEMEX.

Moreover, in addition to the pending challenges in terms of natural gas, the CRE is now in charge of regulating the transportation activities of all liquid hydrocarbons, petrochemicals, and biofuels in a scenario that lacks a precedent of opening. This is happening at a time when the CRE lacks even the human resources to request, process, and manage the information concerning the entirety of PEMEX’s transportation systems of all hydrocarbons. It should be pointed out that in the absence of this information, the development of the value chain—from exploration and production to the trading of oil and petrochemicals—will be substantially delayed.

The carrying out of the competencies recently acquired by the CRE is very complex, since it will require penetrating areas where PEMEX has enjoyed exclusivity for decades. Since its establishment, PEMEX has not had to transmit any information regarding the operating conditions of its oil pipelines, polyducts, and other infrastructure related to the transportation of hydrocarbons, oil, and petrochemicals. Therefore, assuming that PEMEX

is actually willing, the complexities of transmitting the information and its processing and administration still remain.

It is important to point out that unlike the natural gas system, for the remainder of the transportation systems there is no independent operator who transmits the necessary information regarding their operational and economic conditions. Therefore, in this case, the CRE will once again face PEMEX without a mediator, as it has been doing for 20 years during the process of implementing the natural gas reform—a period of time during which it has not achieved the implementation of an open-access policy.

Within this context, coordination could be useful, to the extent that it would help to achieve an approach to determine the steps necessary for PEMEX to provide information on these assets in a much more expedient and efficient manner. The joint participation of the Ministry of Energy, CENAGAS, and the chairpersons of the regulatory agencies may be very useful in articulating the actions necessary to expedite access to information regarding the operation of this infrastructure, whose absence would hinder the development of the industry.

However, whether this council will actually assist in the work of the downstream regulator will to a large extent depend on the political willingness to go ahead with the total opening of PEMEX, not just in terms of competition in exploration and production but also the use of its infrastructure. Without a doubt, this will be a change that will be difficult to implement because it exposes PEMEX to practices that were entirely foreign to it as a monopoly and that, we insist, are indispensable for the development of the industry.

In light of the above, one of the greatest challenges will be to achieve consensus regarding the need to open up the sector in its entirety, regardless of the political cost. This involves the reaction of public opinion, the trade unions, and the opposition parties to the fact that from now on, PEMEX must openly share information with the regulator that it was not previously sharing with any authority because it was considered “strategic information.” Without a doubt, this is a very complex process during which the CRE will require the support of the council in its effort to compel PEMEX to accept the dynamics of competition and efficiency as a result of the implementation of an open-access policy. Otherwise, the signal that would be sent to the international markets is that in spite of being a public entity, PEMEX is ungovernable. It would send the erroneous message that by being linked with the government, PEMEX is exempt from compliance with the rules and, therefore, the rule of law.

Conclusions and Outlook

The purpose of this chapter has been to appraise the capacity of the new design of the regulatory bodies to achieve the effective opening of the hydrocarbons sector under conditions of legal security for all players—whether the investment is new or already existing. Remember that according to the concept of Thomas Wälde, the rule of law entails the rule enforcers’ resistance to political temptations, which permits predicting future industry conditions.

In this paper, we have seen that one of the goals of the reform was to create a regulatory environment that would foster the creation of competitive industry in a very complex political ambit. We have seen that the creation of regulatory agencies that are able to resist political pressures and maintain firm technical resolutions was covered by two different proposals during the debate of the constitutional reform and approval of the secondary laws. The first plan, proposed by the PAN, was to recreate them as autonomous constitutional organizations, which was rejected because it was deemed that the regulatory agencies could not be removed from the government bodies. The second proposal consisted of the implementation of the “coordinated regulatory bodies,” which has been covered by our analysis in this chapter.

In conclusion, after analyzing the “coordinated regulatory bodies,” we observe the following: at this very early stage of the implementation of the reform, it cannot yet be stated with any accuracy the direction the industry will take under this new system. Because it remains very much undefined in the legislation, the Council of Regulatory Agencies of the Energy Sector could have positive effects if it serves as a true channel of communication between the authorities involved in the hydrocarbons sector; it could likewise serve as a means to pressure regulators if inconvenient resolutions are issued. However, it must be emphasized that the law does not authorize this council to instruct the regulators. In any case, if there is any pressure on the regulators, it could happen with or without the actions of the council.

To sum things up, at this point in the implementation of the reform, we believe that the new organization of the regulatory bodies has an uncertain future that depends to a great extent on how coordination is used over the medium and long term. It remains to be seen whether this council effectively meets the goals for which it was created and, even more importantly, reviews the types of issues that they address and sets precedents regarding their effects. Now, at a time when new investment is yet to arrive and there are no data regarding the functioning of the council, it would be difficult and premature to venture any conclusions regarding its functionality.

For the time being, we can conclude that some steps have indeed turned out to be positive for the regulatory agencies. The fact that they now have legal personality and can submit a budget independently puts them in a more advantageous position compared to the earlier model. However, at the time of writing this chapter, the substantial increases in budget and human capital that they require to comply with their greatly expanded powers and functions have not yet fully materialized.

More than anything, there is no better help for regulators than governments’ commitment to reach specific goals of public policy. Until now, Mexico has been very ambivalent in terms of living up to its commitment of creating competition in the energy sector. To the extent that this ambivalence prevails, it will be difficult to maintain strong regulation, under any legal framework.

Endnotes

¹ For the purposes of this analysis, we have excluded the Federal Commission of Economic Competition and the National Agency of Industrial Safety and Environmental Protection since they are not considered coordinated regulating bodies, in accordance with the Law of Coordinated Regulatory Bodies published in the *Official Gazette of the Federation* on August 11, 2014.

² The analytical literature regarding regulatory bodies of the energy sector is not very extensive and tends to be repetitive in its criticisms. Some of the main arguments can be found in the following: Carlos Moreno Jaimes, *Institutional Autonomy and Regulation in Mexico: The Case of the Energy Regulatory Commission* (Mexico City: Centro de Investigación y Docencia Económicas, 1998); Jorge Muñoz Barret et al., *The Petroleum Industry before the Legal-Ecological Regulation in Mexico* (Mexico City: Institute for Legal Research, National Autonomous University of Mexico, 1992); and Marcelo Páramo, “The Energy Regulatory Commission,” *Regulation of the Energy Sector*, Series E. 85 (1997). The book *Contemporary Energy Regulation* (Mexico City: Porrúa ITAM, 2009), edited by Josefina Cortés Campos and Miriam Grunstein, is also helpful.

³ Ministry of Energy, *Forecast of Natural Gas and L.P. Gas 2013-2027*, (Mexico City: Ministry of Energy, 2013), 62-71, http://www.gob.mx/cms/uploads/attachment/file/62950/Prospectiva_de_Gas_natural_y_Gas_L.P._2013-2027.pdf.

⁴ *Ibid.*, 62-71.

⁵ Interview with former commissioner Francisco Barnés conducted in Houston, Texas, on January 27, 2014.

⁶ Josefina Cortés Campos, “The National Hydrocarbons Commission and the Debate Regarding Autonomy, Is It Necessary?” (Mexico City: Centro de investigación para el Desarrollo, A.C., 2013), http://cidac.org/esp/uploads/1/5RegWeb_CNHI708.pdf.

⁷ *Ibid.*

⁸ *Ibid.*

⁹ Law number 9.478 dated August 6, 1997, Article 2 of Chapter 2, Presidency of the Republic, Civil Chamber. Law No. 9.478 dated August 6, 1997, modified most recently on August 7, 1997. http://www.planalto.gov.br/ccivil_03/leis/19478.htm.

¹⁰ Thomas Wälde, “Renegotiating Acquired Rights in the Oil and Gas Industry: Industry and Political Cycles Meet the Rule of Law,” *Journal of World Energy Law and Business* 1, no. 1 (2008): 24.

¹¹ By “Round One,” we refer to the first bidding process whose purpose was the award of contractual areas in shallow waters and onshore fields. National Hydrocarbons Commission, “Round One. Bidding Processes,” <http://rondasmexico.gob.mx/r01-licitaciones/>.

¹² According to the purpose of the CNH, as established by Article 3 of the already repealed Law of the National Hydrocarbons Commission, published in the *Official Gazette of the Federation* on November 28, 2008.

¹³ Josefina Cortés Campos reconstructs the content of the Pact for Mexico regarding regulators: “The relevance and the need to always consider the institutional dimension in the case of structural reforms has not gone unnoticed in our country and can be corroborated when analyzing the constitutional reforms in the framework of the ‘Pact for Mexico’ that occupied the most recent legislative debate; for example, the reform of telecommunications, radio broadcasting, and competition, and, in the coming months, that of energy.” Cortés Campos, “The National Hydrocarbons Commission,” 7.

¹⁴ “Some Points to Strengthen the Initiative of the Telecommunications and Radio Broadcasting Reform” is a document published by Telecom CIDE and the Mexican Institute of Competitiveness (IMCO) in which a group of experts point out and criticize the simplification of the problems in the field of telecommunications, available at http://telecomcide.org/docs/publicaciones/Comunicado_Reforma_Telecom_030413.pdf.

¹⁵ Technically, according to Articles 25 and 28 of the Constitution, neither PEMEX nor the CFE are or have been monopolies and have actually been holders of rights to performance in strategic areas.

¹⁶ For an analysis of this duality, see Víctor G. Carreón and Miriam Grunstein, “PEMEX: The Non-company of All Mexicans? Why PEMEX is not a True ‘Public Company’ and Why It Must Be,” *Journal of Legislative Studies and Public Opinion* 4, no. 8 (2012).

¹⁷ This was the conclusion that was reached by IMCO in “Inexpensive Gasoline Turns Out To Be Quite Expensive,” http://imco.org.mx/articulo_es/la_gasolina_barata_sale_bien_cara/.

¹⁸ Mexican Institute for Competitiveness, *They Changed the Map on Us: Mexico before the Energy Revolution of the 21st Century*, 2013, <http://imco.org.mx/wp-content/uploads/internacional/ICI2013-completo.pdf>.

¹⁹ Chamber of Senators, *Report of the United Commissions on Constitutional Issues, Energy, and Legislative Studies, with a Draft of a Decree Reforming and Adding Different Provisions to the Constitution of the United Mexican States in Energy Matters*, 2014, 25, http://www.senado.gob.mx/comisiones/estudios_legislativos1/docs/relevantes/RCME_3-1.pdf.

²⁰ Ibid., 34.

²¹ Ibid., 133.

²² Ibid., 188-201.

²³ In the language of the petroleum sector, “upstream” activities are those related to exploration and production and “downstream” activities refer to those following refining, such as transportation, storage, and distribution of hydrocarbons.

²⁴ Josefina Cortés Campos was among the first to state these criticisms when she affirmed: “Based on the analysis carried out in this article, it can be affirmed that the CNH, according to the legal framework in force and effect, already has reinforced autonomy for the exercise of its authority. In this respect, it need not be strengthened through more autonomy, but instead it is indispensable to create regulatory mechanisms that successfully balance the functions and competencies of the different administrative bodies.” Cortés Campos, “The National Hydrocarbons Commission,” 31.

²⁵ Ibid., 10. This is referred to by Cortés Campos as “reinforced autonomy,” which she contrasts with administrative deconcentration: “through an organization rendered systematic under the line of hierarchy, power of command, and centralization.”

²⁶ Some of the more polemical resolutions have consisted of regulatory actions that compel PEMEX to comply with regulation, causing strong resistance from the latter. Resolution RES/001/2001.

²⁷ Cortés Campos, “The National Hydrocarbons Commission,” 10-11.

²⁸ The already repealed Law of the National Hydrocarbons Commission was published in the *Official Gazette of the Federation* on November 28, 2008; the Law of the Energy-Regulating Commission was published in the *Official Gazette of the Federation* on October 31, 1995.

²⁹ See article 6 of the already repealed Law of the Energy-Regulating Commission of 1995.

³⁰ This is despite the fact that Article 18 of the PEMEX Law establishes the following: “Public officials who are members of the board of directors will act with impartiality and for the benefit and the best interests of Petróleos Mexicanos, separating at all times the interests of the state ministry, agency, or entity to which they belong, so that it will not be understood that they carry out their functions or vote as their representative.”

³¹ One notable case was the period during which Jordy Herrera, former director of PEMEX Gas, was minister of energy. As minister of energy and president of the board of directors of PEMEX, Herrera engaged in some public policy actions that were inconsistent with the consummation of natural gas competition rules. Among them, he promoted a state marketer of this hydrocarbon and unsuccessfully pushed for PEMEX's exclusive participation in the Ramones gas pipeline, which was the most important project of the Mexican industry in the last 20 years.

³² "Report of the United Commissions," 24-26.

³³ José Roldán Xopa, "Regulatory Bodies: The Errors of Senators Beltrones and Mejía," modified most recently on December 8, 2010, <https://joseroldanxopa.wordpress.com/2010/12/08/organos-reguladores-los-errores-de-los-senadores-beltrones-y-mejia/>.

³⁴ Ibid. Roldán explains: "The review of experiences shows cases of success with both types of organization. Chile, for example, has had relevant achievements in telecommunications with a centralized and hierarchical regulator. What is certain is that there is a dominant trend in favor of autonomous regulators, and the reasons for this structure are supported by the consideration that the autonomy of the central controllers is useful in establishing distance from client decisions, such as designating responsible officials for reasons other than their merits and knowledge, or making decisions to favor or not favor a regulated company for political or personal favors."

³⁵ *Report of the United Commissions*, 153. According to the report, "The strengthening of the regulatory bodies of the sector is not necessarily achieved by granting them constitutional autonomy. Whenever they make regulatory decisions and apply administrative law, what one would expect is that they continue to be in the sphere of the executive branch. Likewise, their independence essentially lies in the mechanisms of appointing commissioners and the fact that they have sufficient technical, human, and financial resources to comply with their mandate."

³⁶ Ibid., 195. The report makes reference to the Colombian model "since it represents an open and competitive environment that has provided incentives for increased effectiveness of the companies that operate in the sector."

³⁷ Ibid., 16. These are the goals that are stated in the report: "Therefore, the competition of state and private operators, both domestic and foreign, together with adequate fiscal rules will guarantee the maximization of the petroleum revenue for the benefit of all Mexicans."

³⁸ The expanded set of competencies of the CRE is set forth in Article 82 of the Hydrocarbons Act, published in the *Official Gazette of the Federation* on August 11, 2014.

³⁹ In any case, it is certain that the energy-regulating bodies were not built with the same institutional scaffolding as their frequently referenced peers in other parts of the world. Even when there was talk of constructing bodies similar to the Norwegian Directorate, the National Oil Agency in Brazil, and the National Agency of Hydrocarbons of Colombia, Mexican regulators were reduced in terms of size, budget, and powers, in addition to being subject to an unusual polygon of regulative coordination. Nonetheless, their recently acquired legal personality, their budgetary autonomy, and the fact that they can have their own resources by means of collecting fees are advances with respect to the earlier model. Likewise, the fact that there is a system of checks and balances in terms of appointment and removal procedures may provide more stability in terms of assignments, always provided that these decisions are not only based on political negotiations.

⁴⁰ Such characteristics are established in Chapters II, III, and IV of the Law of Coordinated Regulatory Bodies of the Energy Sector, published in the *Official Gazette of the Federation* on August 11, 2014.

⁴¹ Law of the Coordinated Regulatory Bodies in Energy Matters, Article 38 (2014).

⁴² A “petroleum assignment” refers to an administrative act under which PEMEX or another state-owned company purchases the exclusive rights for the exploration and exploitation of domestic hydrocarbons.

⁴³ Law of the Coordinated Regulatory Bodies in Energy Matters, Article 41 (2014).

⁴⁴ This council was established in Article 19 of the Law of the Coordinated Regulatory Bodies in Energy Matters (2014).

⁴⁵ According to Article 4 of the already repealed regulative law in Article 27 of the Constitution, which addresses petroleum matters.

⁴⁶ We refer to the language contained in the first legislative proposal, presented to the Senate on April 2, 2014.

⁴⁷ The problem of credibility is resolved by the regulators distancing themselves from whomever might have an interest in favoring the state-owned company. The autonomy of the regulators was based on the power to make decisions based on technical considerations without being subject to political motives.

⁴⁸ One of the basic studies is by Jody Freeman and Jim Rossi, “Agency Coordination in Shared Regulatory Space,” *Harvard Law Review* 125, (2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1778363#%23.

⁴⁹ David Aubin, Koen Verhoest, Emmanuelle Mathieu, and Joery Matthys, “Limited Fragmentation through Coordination in the Regulation of the Energy and Telecommunications Sectors in Belgium,” (Paper presented at the Fifth General Conference of the European Consortium for Political Research, Potsdam, Germany, September 10-12, 2009), article no. 1253.

⁵⁰ Specialization inherently entails the need for coordination. The implementation of specific coordination mechanisms may provide the solution for potential problems of fragmentation, redundancy, contradictions, or vacuums. These mechanisms may be more formal, to the extent that the organizations are limited to exchanging information, or coordination mechanisms may be adapted unilaterally, whether through negotiation or coercion.

⁵¹ Aubin et al., “Limited Fragmentation.”

⁵² For this reason, administrative rules of a general character applicable to the provision of the services of transportation via pipeline and storage of hydrocarbons are at the public consulting stage before the Regulatory Improvement Commission.

⁵³ The National Gas Center (CENAGAS) was created based on the constitutional reform to implement the policy of open and non-discriminatory access, which had not been possible to achieve due to PEMEX’s dominance over these pipelines. CENAGAS’ existence is regulated by Chapter III of the Hydrocarbons Act.

⁵⁴ Explanatory statement of the Hydrocarbons Act, <https://www.mayerbrown.com/files/uploads/Documents/PDFs/2014/Mexico-Energy/HIDROCARBUROS.pdf>.

⁵⁵ The competencies in contractual matters were set forth in Chapter II of the Hydrocarbons Act.

⁵⁶ Explanatory statement of the Hydrocarbons Act.

⁵⁷ CENAGAS was founded in the constitutional reform dated December 20, 2013.

⁵⁸ This will depend on the available capacity of the gas transportation pipelines, in accordance with international practices of open access.