The Legal 500 Country Comparative Guides

Mexico: Energy - Oil & Gas

This country-specific Q&A provides an overview of energy - oil & gas laws and regulations applicable in Mexico.

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1. Does your jurisdiction have an established upstream oil and gas industry? What are the current production levels and what are the oil and gas reserve levels?

Yes, México has an established upstream oil and gas industry, mostly in the region known as Gulf of Mexico where the Mexican State-Owned Company known as PEMEX (“PEMEX”) and private companies carry out exploration and extraction activities, same that are supervised by the National Hydrocarbons Commission (“CNH”).

Mexican upstream oil and gas industry began approximately between the years 70’s and 80’s with the discovery of one of the most important oil fields in the world known as “Cantarell” located in the Gulf of Mexico in an area known as “Sonda de Campeche” 85 Km from a city known as Ciudad del Carmen, Campeche State.

As of July 2019:

- There are 7,726 wells operating in the Gulf of Mexico and 52 studies currently being developed as to verify if oil potential in different areas.
- 111 exploration and extraction of oil and gas contracts awarded by CNH to private companies.
- 413 allocations awarded by CNH to PEMEX to explore and exploit oil and gas fields.

Production levels.

In 2018 production of crude oil reached an average of 1,813 million of crude barrels per day (Source: Petróleos Mexicanos (PEMEX)). As of August 2019, the average production of crude oil has reached 1,672 million of crude barrels per day.

Regarding natural gas, in 2018 production reached an average of 4,847 million of cubic feet per day, while as of August 2019 the average has been of 4,838.

Reserve levels.

As of January 2019, the reserve levels of crude equivalent oil were of:

- 3P: 25,106.1 billion.
- 2P: 15,836.2 billion.
- 1P: 7,897.3 billion.

Prospective resources total an amount of 112,833.3 billion from which 52,629.1 billion correspond to conventional resources and 60,204.3 to non-conventional resources.

2. How are rights to explore and exploit oil and gas resources granted? Please provide
a brief overview of the structure of the regulatory regime for upstream oil and gas. Is the regime the same for both onshore and offshore?

Rights to explore and exploit / ownership.

Rights to explore and exploit oil and gas resources and ownership of such resources once extracted from the subsoil are granted as follows:

• To private companies:
  
  a. By means of exploration and extraction contracts awarded by CNH through a tender procedure, which basically have been:
     
     ◦ License contracts.
     ◦ Production sharing contracts.
     ◦ Profit sharing contracts.

  b. By means of partnerships with PEMEX for specific areas that were farmed out by such company and which partner was chosen by CNH through a tender procedure.

• To PEMEX:

  a. By means of exploration and extraction contracts allocated by CNH in round zero (were PEMEX requested certain oil and gas fields that prior 2013 had been discovered or operated by PEMEX).

  b. By means of exploration and extraction of hydrocarbons contracts awarded by means of the tender procedures called by CNH.

  c. By means of partnerships with private companies for specific areas that were farmed out and which partner was chosen by CNH through a tender procedure.

Regulatory regime.

As of December 2013, oil and gas resources were solely owned by the Mexican Government and hydrocarbon activities were exclusively reserved to PEMEX (including upstream and downstream activities).

However, on 2013 Mexican Congress amended the federal constitution allowing private participation in all hydrocarbon activities, including upstream activities. As of this year there is no restriction for private companies to participate in these activities.
Mexican Energy Ministry ("SENER") along with CNH prepare (each five years) a master plan in which all areas to be tendered are detailed. This program includes specific data for each area, such as, location, extension, type of hydrocarbons, prospective resources and round in which they will be tendered.

Participation of private companies in exploration and extraction of hydrocarbons is now carried out by means of the above-referred exploration and extraction contracts which are awarded by CNH through tender procedures in which the areas and fields included in SENER’s master program, are tendered.

Participation of PEMEX in exploration and extraction activities is made over areas where activities were carried out prior 2013. These areas where allocated to PEMEX by CNH in a round known as “round cero”. In addition, PEMEX has also been awarded by CNH with exploration and extraction contracts over areas that were tendered by such authority. Lastly, as per the Hydrocarbons Law, PEMEX has been able to partner with some private companies to jointly explore and exploit certain areas allocated by CNH.

Key legislation governing upstream activities in Mexico is the Hydrocarbons Law and its regulations, which were published in the Federal Official Gazette on August 11, 2014 and October 31, 2014 respectively. The referred law sets out, among other matters: (i) rules allowing private individuals and companies to participate in upstream activities; (ii) types of contracts to be awarded by CNH; (iii) environmental protection regulations and guidelines for environmental, industrial safety and operative safety applicable for upstream activities.

Upstream activities are regulated and supervised by CNH.

Regime is the same for onshore and offshore activities provided however that for onshore activities additional local and municipal regulations may apply which may vary depending the Mexican State and municipality where the project is to be carried out.

3. **What are the key features of the licence/production sharing contract/concession/other pursuant to which oil and gas companies undertake oil and gas exploration and exploitation?**

According to the hydrocarbon’s legal framework, rights to oil and gas depend on the contractual plan applicable to exploration and extraction activities. This can be one of the following:

- Share profit contract: the total production derived from the contract is delivered to a vendor who will sell the product. The profit resulting from the sale will be distributed between the government and contractor.
- Share production contract: a percentage of the production is given to a contractor and a revenue (percentage of the operative utility) is given to government. The contractor
assumes all costs and risks related to the activities.
- Licence agreement: the government exclusively owns underground hydrocarbons until they are extracted from the subsoil and, after being extracted, they can be sold by contractor to private entities.

**License / Concession.**

For a licence contract, the term established is 35 years, which can be extended two additional times, for a term of five or ten years. CNH must have previously approved the extension period.

**Taxes / royalties.**

Taxes and royalties vary depending on the contractual plan for the exploration/extraction area, as well as per the offer made by awarded company during the tender procedure. Taxes are set forth in the Hydrocarbons Revenue Law.

**Liabilities.**

According to the contract plan, contractor/private companies will be liable for:

- Performing all environmental obligations, commitments and conditions prescribed by the applicable laws, industry best practices, and environmental permits.
- Environmental damage caused by the contractor in carrying out petroleum activities.

Where the contractor is a consortium, each participating company that is part of the consortium is jointly and severally liable for the performance of every contractor’s obligations under the contracts.

**Restrictions.**

Restrictions provided in exploration/extraction contracts mainly relate to:

- The creation of liens or ownership restrictions on the rights arising from the contracts or materials (for example, when the contractor seeks to impose these liens as security for a debt).
- The contractor(s) selling, assigning, transferring, conveying or otherwise disposing of any rights (including participating interests) or obligations under the contract. To do this, the contractor(s) must obtain the prior written consent of CNH.
- Change of control in any member of the consortium without notice to CNH.

Additionally, according to bidding rules, no member may participate in a consortium other
than those prequalified under the bidding process.

**Taxes.**

For a bidder to be awarded a hydrocarbons contract, its economic offer must be the best offer within the bidders. The Mexican Government, through CNH, determines minimum values for each type of contract scheme. If a bidder is awarded a contract, the bidder’s economic offer will apply to the contract.

The relevant taxes, royalties, and other consideration are determined by a combination of the offer made in the bidding procedure, the rules set out in the Hydrocarbons Revenue Law, and the rules set out in bidding procedures. Finally, different fees and royalties apply, depending on the contract type, whether licence contract, production sharing contract, or profit-sharing contract. The contractual rates cannot be modified as they form an integral part of the contract.

**Production sharing contract.**

For a production sharing contract, the contractual term is of 30 years and can be extended for up to two additional times for periods of five years each.

**Taxes / government revenue (participation in the operative utility).**

Taxes and government revenue vary depending on the contractual plan for the exploration/extraction area, as well as per the offer made by awarded company during the tender procedure. Taxes are set forth in the Hydrocarbons Revenue Law.

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- Change of control in any member of the consortium without notice to CNH.

Additionally, according to bidding rules, no member may participate in a consortium other than those prequalified under the bidding process.

4. **Are there any unconventional hydrocarbon resources (such as shale gas) being exploited and is there a separate regulatory regime for unconventionals?**

As of this date, production of unconventional shale oil has been irrelevant since no techniques to extract those resources have been implemented.

Specific regulatory regime for unconventional resources is under revision by some governmental authorities. Additionally, discussions regarding exploitation of shale gas have been held in the Mexican Congress as to assess if specific regulations and legislations should be enacted.

ASEA (as defined below) has issued some environmental guidelines for the exploration and extraction of hydrocarbons within shale rocks. Additionally, the National Water Commission has also release some regulations regarding the use of water for share activities.

5. **Who are the key regulators for the upstream oil and gas industry?**

Hydrocarbon activities, such as oil and gas, are regulated by the:

- Energy Ministry (“SENER”).
- CNH.
- Energy Regulatory Commission (“CRE”).
- National Agency of Industrial Safety and Environmental Protection of the Hydrocarbons Sector (“ASEA”).
- National Centre of Natural Gas Control (“CENAGAS”).

Oil and gas / energy public policies.

SENER is the direct government authority in charge of determining the energy policies applicable for Mexico. For instance, prior the new government regime which took office on
December 2019, the public policy from SENER was to encourage participation of private companies in the oil and gas industry by means of awarding exploration and extraction of hydrocarbons contracts through CNH.

As of December 2019 the energy public policy has been to strengthen PEMEX as the State-Owned government company for such company to increase its activities and production.

*Supervision of upstream activities.*

CNH is responsible for supervising and regulating upstream activities by, among other things:

- Organising tender procedures to award contracts for the exploration and extraction of hydrocarbons (oil and gas).
- Managing and supervising contracts that have been awarded.
- Supervising and authorizing development plans filed by awarded companies for the blocks and fields that were awarded to them.

Supervision of health, safety and environmental protection derived from hydrocarbon activities, included those related to upstream activities, is the responsibility of the ASEA. ASEA is a governmental body of the Environmental and Natural Resources Ministry (Secretaría de Medio Ambiente y Recursos Naturales) (“SEMARNAT”).

In 2014, ASEA was created as a result of constitutional amendments approved in 2013. It was created, in particular, to:

- Monitor and ensure that all hydrocarbon activities are carried out under sustainability principles.
- Respond to and resolve an accident or emergency in the industry.

*Natural gas*

Natural gas activities are supervised and regulated by the CRE and CENAGAS.

CRE is the regulatory government body that issues all permits related to oil products (i.e. gasolines and diesel) and gas (mainly in connection with downstream activities). Additionally, it supervises and inspects compliance with laws, regulations, and Mexican official standards.

CENAGAS was created to manage, administer, and operate the National Natural Gas Transportation and Storage System and to ensure continuity and safety in the provision of natural gas throughout Mexico.
6. **Is the government directly involved in the upstream oil and gas industry? Is there a government-owned oil and gas company?**

Yes, by regulating such industry through the key regulators referred in point 5) above and by participating directly in such activities, mainly in the exploration and extraction of hydrocarbons, through its State-Owned oil and gas company known as PEMEX which, as of this day continues having and carrying out most of the upstream oil and gas activities in the Mexican Gulf.

For the above-referred purposes, PEMEX has divided its exploration and extraction operations in four main regions: (i) north; (ii) south; (iii) northeast marine region; and (iv) southeast marine region. Upstream activities are carried out in the marine regions.

PEMEX also has a relevant participation in downstream activities since, as mentioned, prior 2013 it was the only company in Mexico carrying out hydrocarbon activities.

PEMEX downstream participation includes refining crude oil as to prepare gasolines, diesel, jet-fuel, aircraft gasoline, among other products. Refining activities are carried out through 6 different oil refineries located in different Mexican States.

Additional infrastructure owned by government, through PEMEX includes: (i) storage and distribution facilities; (ii) five (5) petrochemicals facilities; (iii) seven (7) natural gas processing complexes; (iv) five maritime terminals.

Additionally, government, through CENAGAS (as defined below) has ownership of a major extension of the gas pipelines system in Mexico. Such system is operated and managed by such authority.

7. **Are there any special requirements for or restrictions on participation in the upstream oil and gas industry by foreign oil and gas companies?**

No, there are no restrictions for foreign companies to participate in upstream activities in Mexico, provided however that to participate in the tender procedures called by CNH for the awarding of exploration and extraction of hydrocarbons contracts they have to comply with the requirements included in the bidding guidelines released for each tender.

Requirements included in the referred guidelines will vary depending the type of area / block to be tendered but same could include: (i) proven experience in exploration and extraction activities for the type of area being tendered; (ii) technical and financial capacities; (iii) proven experience in matters related to environmental, operational and industrial safety; (iv) human capacity.

If derived from a tender procedure a foreign company is awarded with an exploration and
extraction contract by CNH, the basic requirement is for such foreign company to incorporate a Mexican entity having as corporate purpose the exploration and extraction of hydrocarbons.

Foreign entities must contemplate that special requirements to participate in the tender called by CNH could be included in the bidding guidelines.

8. **What are the key features of the environmental and health and safety regime that applies to upstream oil and gas activities?**

Companies engaged in upstream activities must comply with the following legislation:

- Environmental Protection and Ecologic Balance General Law and its Regulations.
- Hydrocarbons Law.
- Environmental Responsibility Federal Law and its Regulations.

The main purpose of these laws and regulations is to develop the hydrocarbons industry in a sustainable manner. Prior to the energy reform of 2013, the state-owned oil company PEMEX, through its environmental protection division, implemented several programmes and issued specific internal regulations regarding environmental and industrial safety applicable to its upstream infrastructure. PEMEX infrastructure is, therefore, subject not only to the new regulations but also its internal rules.

One of the main requirements to participate in and pre-qualify for the tender procedures to award exploration and extraction contracts is to present documents evidencing experience in industrial safety and environmental protection for at least five years prior to the tender procedure. These requirements can vary depending on the tender procedure and the type of block to be tendered (i.e. whether it relates to ultra-deep waters or shallow waters).

All matters related to safety and environmental in upstream activities are regulated by the SEMARNAT, through the created special agency, ASEA. The ASEA Law, states that it has, among others, the obligation to prevent and attend emergency situations in the industry, as well as to issue regulations in connection with environmental and industrial protection.

9. **How does the government derive value from oil and gas resources (royalties/production sharing/taxes)? Are there any special tax deductions or incentives offered?**

As mentioned previously, the relevant taxes, royalties, and other consideration are determined by a combination of the offer made in the bidding procedure, the rules set out in the Hydrocarbons Revenue Law, and the rules set out in bidding procedures. Finally, different fees and royalties apply, depending on the contract type, whether licence contract, production sharing contract, or profit-sharing contract. The contractual rates cannot be
modified as they form an integral part of the contract.

**Licence contracts**

The following apply:

- **Contractual fee for the exploration phase.** For the first 60 months (five years), this is MXN1,150 per square kilometre, and MXN2,750 after the first 60 months.
- **Royalties.** This is calculated by applying a formula to the contractual spot price of hydrocarbons. Each participant must provide an additional royalty value.
- **Variable consideration.** The minimum variable consideration is determined by the Finance Ministry. Bidders, when filing their economic proposals, offer a variable consideration. The consideration proposed by the successful bidder applies to the contract.
- **Exploration and production activities tax.** This is payable at MXN1,500 per square kilometre during exploration, and MXN6,000 per square kilometre during extraction.
- **Duties for environmental protection.** These can vary depending on the exploration and extraction scheme.
- **Duties for supervision and administration of contracts.** These are determined by the government.
- **Adjustment mechanism.** This is calculated according to a formula defined in the Rules of Bidding Procedures.
- **Corporate Income Tax.** This is payable at 30% of income.
- **States and Municipalities Tax.** This varies depending on the state and municipality.
- **Employee’s profit share.** This is variable.
- **Signature bonus.** Under the Hydrocarbons Revenue Law, this bonus is determined by the Finance Ministry for each contract.

**Production sharing contracts**

The following apply:

- **Corporate Income Tax.** This is payable at 30% of income.
- **Contractual fee for the exploration phase.** For the first 60 months (five years), this is MXN1,150 per square kilometre, and MXN2,750 after the first 60 months.
- **Exploration and production activities tax.** This is payable at MXN1,500 per square kilometre during exploration, and MXN6,000 per square kilometre during extraction.
- **Cost recovery limit.** This relates to all related costs, expenses and investments included in the working programmes which can be recovered by a contractor under the contract and guidelines that will be issued by the Finance Ministry.
- **Royalties.** This is calculated by applying a formula to the contractual spot price of hydrocarbons.
- **Variable consideration.** The minimum variable consideration is determined by the
Finance Ministry. Bidders, when filing their economic proposals, offer a variable consideration. The consideration proposed by the successful bidder applies to the contract.

- Duties for environmental protection. These can vary depending on the exploration and extraction scheme.
- Duties for supervision and administration of contracts. These are determined by the government.
- Adjustment mechanism. This is calculated according to a formula defined in the Rules of Bidding Procedures.
- States and Municipalities Tax. This varies depending on the state and municipality.
- Employee’s profit share. This is variable.
- Government’s production share. The CNH provides minimum values for the government’s consideration in the operative profit; greater amounts can be agreed in the auction.

10. **Are there any restrictions on export, local content obligations or domestic supply obligations?**

There are no restrictions on export provided that as per the applicable legislation, export of oil requires a special export permit issued by SENER.

Crude oil is usually exported by PEMEX through a subsidiary company, PMI International Commerce. PEMEX is the only company that currently exports crude oil from Mexico, as exploration and extraction contracts have only just been awarded in the past three / four years to private companies. The main exported products are:

- Istmo (light crude oil with 33.6° API).
- Maya (heavy crude oil with 22°API).
- Olmeca (very light crude oil with 39.3°API).

Crude oil is mainly exported to North America and Europe.

**Local content**

Pursuant to the Hydrocarbon Law, companies must comply with minimum percentage requirements for local content. This is determined according to provisions set by the Ministry of the Economy and the contract terms, although there is a requirement to achieve at least 35 per cent local content for all related activities.

Notwithstanding the above, this percentage will not apply to deep and ultra-deep-water activities.

Failure to comply with minimum local content requirements may lead to the imposition of
fines or penalties.

As mentioned, the Ministry of Economy sets the criteria to achieve the percentages required under the law and contracts regarding local content requirements, which include, goods, services, personnel, training, transfer of technology and local infrastructure.

11. **Does the regulatory regime include any specific decommissioning obligations?**

Yes.

When decommissioning a site / field, the owner or possessor of the site must observe and comply with the conditions set out in: (i) the exploration and extraction contract awarded by CNH; and (ii) the environmental authorisation obtained for the project (environmental impact authorisation for the closure stage; environmental risk study approval and accident prevention plan (if any), or other environmental authorisation obtained).

*Exploration and extraction contract.*

Contract provides certain decommissioning and dismantling obligations for contractor.

In first instance, development programs filed by contractor to CNH must include specific sections related to the abandonment, which shall provide actions to be carried out regarding decommissioning of installations.

As provided in the contract awarded by CNH, contractor must incorporate an abandonment trust with a Mexican institution approved by CNH. The founds of the trust may only be use for all activities related to the abandonment and decommissioning of installations. Contracts provide a specific formula that must be observed as to fund the trust (composed by annual contributions, estimated production and proven reservoirs).

Finally, contracts provide a final transition stage which must begin one-year prior termination of the contractual term in which a contractor will handle the contractual area to CNH or a third authorized party as to carry out all activities needed for the abandonment and decommissioning.

*Environmental provisions.*

Although it is not obligatory, it is advisable to file a notice with the relevant environmental authorities (SEMARNAT), local environmental offices, and so on, informing them of the decommission of the site.
In relation to hazardous wastes, it is necessary to:

- File a closure notice with SEMARNAT informing it of the closedown of the facilities.
- Dispose properly of all remaining hazardous wastes.
- Properly document the disposal.

If a concession title to use national waters or a permit to discharge wastewater was obtained for productive activities purposes, the title can be cancelled or transferred to a third party.

In addition, exploration and extraction contracts include some provisions and clauses related to decommissioning obligations, which must be observed by contractors.

12. **What is the regulatory regime that applies to the construction and operation of offshore and onshore oil and gas pipelines?**

Construction and operation of oil and gas pipelines is usually made: (i) by private companies having an interest in developing pipelines for certain specific areas in Mexico, or (ii) upon a tender procedure called by a government authority to develop a specific project.

*Prior permit required from CRE.*

Prior construction of a pipeline a permit must be secured by developer from CRE in which CRE will: (i) authorize the intended activity; (ii) authorize the project; (iii) set the conditions and characteristics for the design and construction of the pipeline system, including technology and engineering specifications; (iv) authorize construction of the required works.

*Private pipelines.*

Its construction is usually regulated by: (i) permit issued by CRE; and (ii) by means of Mexican Official Standards, which set specifications and criteria for, among other matters, the design, construction, operation, maintenance, closing-down of such pipelines.

Additionally, local and municipal regulations (mainly related to construction provisions) will apply and vary depending the place in which they are to be developed.

Onshore pipelines represent major challenges for developers mainly since they have to secure surface rights over all of the properties under which the pipeline will cross.

*Pipelines tendered by government.*

Public entities, mainly the Federal Electric Commission ("**CFE**") and CENAGAS usually call for tenders to construct and develop oil and gas pipelines (either in onshore or offshore...
Requirements for the construction will be regulated by: (i) permit issued by CRE; (ii) specific rules and requirements included in the tender guidelines released by the authority that requested the construction of such pipeline; and (iii) Mexican Official Standards.

As an example of the above, in 2015 CFE released the tender guidelines for the design, construction, operation and maintenance of a marine pipeline with a length of 772 km. The type of contractual scheme was a service contract awarded by means of an international public tender. Term of the awarded contract was of 35 years. Remuneration for the awarded company was composed by: (i) a fixed fee for capacity; and (ii) a variable fee for the use.

Social impact evaluation.

As per the Hydrocarbons Law, prior obtaining a permit to develop hydrocarbons projects, companies must file a social impact study before SENER, which must include, among other matters: (i) identification, prediction and assessment of the possible social impacts that could derive from the project and activities; (ii) mitigation measures; (iii) social management programs.

In any case, SENER will issued a resolution which may include recommendations that must be observed by company’s prior development of their projects.

Pipeline operation.

Once a pipeline has been constructed its operation mainly relies on a permit issued by CRE for a 30-years term and, in any case, by the additional federal, local and municipal permits required for the project (i.e. environmental impact assessments, construction licenses, civil protection programmes, among others).

The referred permit issued by CRE will set the conditions under which the operation will be carried out (i.e. transportation), including the authorized activity, restrictions, route, operative capacity, operation and maintenance provisions.

In addition to the terms and conditions included in each permit, permit holder will have to comply with the legal administrative provisions issued by CRE in connection with activities carried out by means of pipelines.

CRE will be the regulatory authority in charge of supervising the compliance of the permit, as well as of the legal framework applicable to the authorized activities. In case of any breach to the permit or applicable regulations, CRE will be entitled to impose sanctions.
Notwithstanding the above, additional federal, local and municipal authorities may intervene in supervising activities related to the pipeline system (i.e. federal environmental authorities such as ASEA, local authorities regarding civil protection matters, among others).

13. **What is the regulatory regime that applies to LNG liquefaction and LNG receiving terminals? Are there any such terminals in your jurisdiction?**

*Permit from CRE.*

LNG activities regulated and supervised by CRE are: (i) transportation; (ii) storage; (iii) distribution; (iv) public sale; (v) commercialization; and (vi) liquefaction.

In order to carry out activities related to LNG a permit from CRE must be secured in which CRE will include, among other matters, (i) terms and conditions applicable to the intended activities; (ii) obligations for permit holders; (iii) authorized infrastructure.

Among the information and documents that CRE will assess prior granting a LNG permit are those documents evidencing that the project / infrastructure to be developed complies with all safety requirements, including those issued by the criteria published by ASEA.

Activities related to liquefaction of LNG are regulated by: (i) permits issued by CRE; (ii) administrative provisions issued by CRE regarding LNG activities; (iii) legislation applicable to LNG activities, mainly the Hydrocarbons Law and regulations on activities described in section 3 of the Hydrocarbons Law; and (iv) for dismantling and decommissioning of liquefaction activities, by the administrative regulation that has been issued by ASEA.

As per Mexican legislation there are no restrictions for private companies to invest in LNG projects and activities provided, they comply with all requirements as to obtain a permit from CRE, among them to be an entity incorporated under Mexican legislation.

Although the main regulatory entity that supervises LNG activities is CRE, there could be additional federal, local and municipal authorities that could supervise such activities (i.e. federal environmental authorities such as ASEA, local authorities regarding civil protection matters, among others).

*Social impact evaluation.*

As per the Hydrocarbons Law, prior obtaining a permit to develop hydrocarbons projects, companies must file a social impact study before SENER, which must include, among other matters: (i) identification, prediction and assessment of the possible social impacts that could derive from the project and activities; (ii) mitigation measures; (iii) social management programs.
In any case, SENER will issue a resolution which may include recommendations that must be observed by company’s prior development of their projects.

*Additional licenses and permits.*

LNG facilities are usually developed and constructed in land and therefore additional regulatory regime could apply, mainly in connection with matters that are of local and municipal jurisdiction (*i.e.* use of land, construction, operation, civil protection). Additional regulatory regime will vary depending the place in which the facility is to be developed.

Additional permits / authorizations of federal jurisdiction could be required for the development of a gas storage project, mainly regarding environmental matters such as an environmental impact study or environmental risk assessment.

*Existing LNG terminals in Mexico.*

In México there are three LNG receiving terminals located in the cities of Manzanillo, Altamira and Ensenada.

14. **What is the regulatory regime that applies to gas storage (not LNG)? Are there any gas storage facilities in your jurisdiction?**

Permit from CRE.

Natural gas activities are regulated and supervised by CRE.

As of today, CRE has not issued permits related to natural gas storage. All storage permits that have been issued have been granted for oil products such as gasolines, diesel and jet-fuel.

Notwithstanding the above, as in LNG, in order to carry out activities related to natural gas a permit from CRE must be secured in which CRE will include, among other matters, (i) terms and conditions applicable to the intended activities; (ii) obligations for permit holders; (iii) authorized infrastructure.

No activities related to natural gas may be carried out without holding this permit.

Social impact evaluation.

As per the Hydrocarbons Law, prior obtaining a permit to develop hydrocarbons projects, among them gas facilities, companies must file a social impact study before SENER, which
must include, among other matters: (i) identification, prediction and assessment of the possible social impacts that could derive from the project and activities; (ii) mitigation measures; (iii) social management programs.

In any case, SENER will issued a resolution which may include recommendations that must be observed by company’s prior development of their projects.

Additional licenses and permits.

Since gas storage facilities are usually developed and constructed in land, additional regulatory regime could apply besides the permit that must be obtained by CRE, mainly in connection with matters that are of local and municipal jurisdiction (i.e. use of land, construction, operation, civil protection). Additional regulatory regime will vary depending the place in which the facility is to be developed.

Additional permits / authorizations of federal jurisdiction could be required for the development of a gas storage project, mainly regarding environmental matters such as an environmental impact study or environmental risk assessment.

Existing gas storage facilities in México.

As of this date there are no major gas storage facilities in Mexico, however, a project is currently being developed and analysed by SENER and CENAGAS under the name of “strategic storage” which aims to be developed in a major field that was classified as non-useful for the extraction of hydrocarbons known as “Jaf”. The purpose of this project is to storage approximately 10 thousand million cubic feet of natural gas as to have reservoirs for between 3 to 5 days in case of national emergencies.

15. Is there a gas transmission and distribution system in your jurisdiction? How is gas distribution and transmission infrastructure owned and regulated? Is there a third party access regime?

Yes, there are gas transmission and distribution systems in México.

Before the 2013 Mexican energy reform, all gas and oil pipelines were owned and managed by the state-owned production company, PEMEX. After the 2013 energy reform, all gas pipelines were transferred to CENAGAS.

Following the 2013 reform it is now possible for private individuals and companies to construct and operate pipelines. Federal, local, and municipal permits are required for the construction and operation of pipelines. Additionally, official Mexican standards setting pipelines requirements apply.
Some of the permits required by law to construct pipelines are:

- Construction permits, which are issued by the municipal authorities.
- Environmental permits which are issued by federal authorities, such as the Environmental and Natural Resources Ministry (SEMARNAT).
- Operating permits, which are issued by CRE.

Prior to the construction of a pipeline in Mexico it is necessary to obtain surface rights over the area the pipeline will be built. In Mexico, a great part of the territory is deemed agrarian (ejido) land, which is subject to special laws and regulations. These lands are communal lands used for agriculture on which community members farm and maintain holdings.

To acquire surface rights over agrarian land certain requirements must be met which are included in the Agrarian legislation. Typically, surface rights are secured by signing rights of way with landowners or by purchasing the land.

*Third-party access regime.*

There is a system of third-party access regulated by the Energy Regulatory Commission (CRE).

The CRE has issued specific regulations setting out obligations for permit holders of pipelines, to guarantee open access by third parties to natural gas or oil products.

Under these regulations, permit holders must provide services (such as transportation) to users under similar conditions whenever there is available capacity.

16. **Is there a competitive and privatised downstream gas market or is gas supplied to end-customers by one or more incumbent/government-owned suppliers? Can customers choose their supplier?**

No, there is not a competitive downstream gas market in Mexico.

Although (i) some private companies have been awarded with contracts to design, construct and operate gas pipelines throughout México which are either under construction or they already began operations, and (ii) private companies have constructed private gas pipelines to supply specific customers, most of the gas pipeline system is currently managed and operated by the State entity known as CENAGAS which plays a role of manager and natural gas transporter, not supplier.

CENAGAS was created on August 2014 as a government entity sectorized to SENER which began operations in 2015. As of such date, the national gas system (including all related
pipelines) that were previously owned and managed by PEMEX were transferred to CENAGAS.

As of this date most of the gas is transported by CENAGAS.

Notwithstanding the above, customers may freely choose their gas suppliers which, in any case, will have to enter into a transportation contract either with CENAGAS or with the private company owning the pipeline.

17. How is the downstream gas market regulated?

From a federal perspective, the main regulatory regime that applies to these activities are:

- The Hydrocarbons law and its regulations.
- The Law of the National Industrial Safety and Environmental Protection Agency in Hydrocarbon Matters;
- Regulations on activities described in section 3 of the Hydrocarbon Law.
- Administrative provisions in matters related to natural gas activities (open access, services related to pipeline transportation, storage, commercialization).

All downstream activities are supervised by the regulatory entity known as CRE which receives, analyse and issues all permits related to, among other matters: (i) gas processing; (ii) storage; (iii) distribution; (iv) compression and decompression; (v) liquefaction and regasification; (vi) commercialization; and (vii) public sale, of gas.

Each of the activities described before requires a special permit issued by CRE. To obtain such permits, companies must comply with different requirements.

All permits issued by CRE include the terms and conditions applicable to the activity for which they were issued, including: (i) term and purpose of the permit; (ii) applicable regulation; (iii) description of the authorized services and infrastructure; (iv) corporate information regarding permit holder; and (v) obligations.

As per the Hydrocarbons Law, CRE is entitled to supervise all permitted activities, as well as to impose sanctions and fines in case of any breach to the terms and conditions of the permits.

Day to day activities regarding the gas market, as well as obligations of permitholders involved in such activities are mostly regulated by the administrative provisions issued by CRE which include in detail all regulatory aspects applicable to the market.

From a local and municipal perspective, certain regulations may apply which do not aim to regulate the gas market itself but the infrastructure that companies may develop in specific
cities, such as, compression or decompression stations, gas pipelines, among others.

Local and municipal regulation aims to develop the type of infrastructure referred above.

CENAGAS, as mentioned, previously, plays an important role in connection with the Mexican gas market since its main purpose is to guarantee the continuity and safety of natural gas supply which manages most of the natural gas pipelines systems in Mexico.

CENAGAS in addition of being the manager of the natural gas pipeline system, its also a natural gas transporter and therefore it has natural gas transport agreements entered with a vast amount of private entities.

18. **Have there been any significant recent changes in government policy and regulation in relation to the oil and gas industry?**

Although the constitutional framework has not been modified since 2013 and therefore, private investment in oil and gas activities is fully allowed, the recently elected government has certainly expressed it has a new vision of what should the government do to increase oil production in Mexico and decrease import of oil products.

Federal government now intends to strengthen PEMEX role in activities such as exploration, production and refining of crude oil.

Federal government has taken, among other actions, the following:

a. Suspension of tenders to award exploration and extraction of hydrocarbons contracts which were called by CNH.
b. Suspension of farm out tenders to choose a partner for PEMEX to exploit, jointly with such partner, certain areas that were allocated to PEMEX.
c. Suspension of electric auctions called by CENACE.
d. Revision of PPA contracts awarded under the first, second and third long-term electric auctions.
e. Suspension of open seasons called by PEMEX logistics to award storage capacity.
f. Suspension of certain energy projects.
g. Inclusion of new requirements by SENER to obtain import and export permits for oil products, such as gasolines, diesel, jet-fuel and aircraft gasoline.
h. Inclusion of additional requirements as to obtain permits from CRE for downstream permits.

Additionally, federal government has issued and announced new refining programs.

These programs aim to: (i) increase PEMEX investments in oil activities in approximately
$75.00 billion pesos during 2019 (approximately USD $3.7 billion); (ii) construction of a new oil refinery in Dos Bocas, Tabasco State; (iii) aim to be self-sufficient in three years in connection with the oil products (mainly gasolines and diesel) that Mexico requires since as of this date Mexico, as per official government information, imports 75% of the gasolines and diesel it requires and only produces 25%; (iv) lower the costs of gasolines and diesel.

Furthermore, the Energy Ministry has announced the following plans related to the National Refining Plan: (i) rehabilitation of the six existing refineries as to reach, by 2020, a production of 600 thousand barrels of gasolines per day; (ii) construction of the new refinery in Dos Bocas, Tabasco which is expected to have a capacity for processing 340 thousand barrels daily.

As mentioned, although no constitutional amendments have been made, federal government would seem to prefer to carry out oil and gas activities though the State-Owned Productive Company PEMEX and award service agreements to private companies to develop and carry out specific works and services under PEMEX supervision, rather than awarding contracts.

Certainly, the energy public policy to be implemented by this government will be important as to determine the viability of new projects and investment opportunities, nevertheless, the recent elected government has been in office for a short term and most of these policies are still under revision as of this date.

19. **What key challenges have been identified by the government and/or industry in relation to your jurisdiction’s oil and gas industry?**

**Government.**

The main challenge identified by the government has been to increase oil production in México and strengthen the Mexican State-Owned Company known as PEMEX by increasing its operations, mainly in offshore shallow water areas.

Additionally, government has also identified as a challenge decreasing the import of refined oil products such as gasolines and diesel. Among the first actions taken by the federal government to tackle this challenge was beginning the construction of an eight (8) refining facility in the Mexican State of Tabasco.

Some highlights of the new oil refinery are:

- Refining capacity of 340 thousand barrels per day (which would include approximately 170 thousand barrels of gasoline and 120 thousand of diesel).
- Location is ideal because the oil pipelines and raw material will come from the coast of Tabasco and the probe of Campeche.
- Will allow 135 direct and indirect jobs.
Infrastructure includes: (i) 17 refining plants to process 100% Mayan crude oil; (ii) storage facilities; (iii) cooling towers; (iv) water treatment plants.

- Refining capacity of 340,000 barrels of crude oil per day.
- This project is part of the national refining plan announced by the federal government, which aims to reduce the high amounts of oil products and crude oil which are imported by México as to be self-sufficient in three years.

Private entities.

The main challenge identified by private companies regarding energy industry and market has been to continue participating and investing in energy projects.

Private companies have also expressed their interest in the reactivation of the tenders called by CNH for the awarding of exploration and extraction contracts as well as tender related to areas to be farmed out.

Additional challenges for private companies that have been identified include: (i) increase investment opportunities for the development of downstream infrastructure, among them gas and oil pipelines and storage facilities; (ii) avoid federal government interfering with the autonomous activity of the energy regulatory entities created for such purposes (i.e. CRE and CNH); (iii) commitment by the federal government regarding the compliance of the terms and conditions of the contracts already awarded and activities which are being carried out by private companies.

Finally, private companies expect to have legal certainty regarding upstream and downstream activities, including clear regulatory requirements to obtain the permits that are needed to carry out such activities.

20. Are there any policies or regulatory requirements relating to the oil and gas industry which reflect/implement the global trend towards the low-carbon energy transition?

Yes, there are policies and regulatory requirements to tackle this trend which has included among other matters, regulations regarding waste, flares and vents, air emissions, compliance with goals as to decrease the low-carbon energy.

Waste.

The Mexican environmental legal framework is intended to prevent and mitigate any possible soil pollution resulting from the incorrect management of waste products. There are several rules that must be observed when disposing of waste products, especially waste with hazardous characteristics, such as waste resulting from the oil or gas extraction or processing industry.
Additionally, ASEA has issued regulation, through Mexican Official Standards that aim to prevent an inadequate disposal of wastes.

Flares and vents.

The National Hydrocarbons Commission (CNH) has issued technical regulations for the use of natural gas associated with exploration and extraction of hydrocarbons.

Air emissions.

For environmental emissions from fixed sources within the oil and gas extraction and process industry, a Federal Environmental Sole Licence must be obtained from the Environmental and Natural Resources Ministry (SEMARNAT) through the National Agency of Industrial Safety and Environmental Protection of the Hydrocarbons Sector (ASEA). In addition, it is necessary to file an annual report with SEMARNAT concerning emissions generated during the previous calendar year.

Additionally, on December 24, 2019 Mexican Congress enacted the Energy Transition Law which aims to regulate the exploitation of the sustainable energy.

Finally, Mexico has been signatory of international conventions regarding climate change and has committed itself to comply with the international commitments to reduce carbon emissions. Among these conventions Mexico has signed the Paris agreement.