



# Mexico

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## Description of domestic sector

- 1 Describe the domestic natural gas sector, including the natural gas production, liquefied natural gas (LNG) storage, pipeline transportation, distribution, commodity sales and trading segments.

Mexico is one of the few countries that has liberalised its natural gas midstream and downstream industry without liberalising and allowing competition in the production of such fuel. Currently, natural gas production is exclusively reserved to the Mexican state through *Petróleos Mexicanos*, and its four operating subsidiaries (collectively, Pemex). Pemex is a public instrument of the federal government of Mexico created in 1938 by an act of Congress and entrusted by law to exclusively develop Mexico's petroleum industry. Except for the natural gas midstream and downstream industry, in Mexico the petroleum industry (oil, gas and basic petrochemicals) is subject to a vertically integrated monopoly established in favour of Pemex.

In 1995, Congress passed a bill amending the 1958 Petroleum Law, allowing private participation (national and foreign) in the transportation, storage (including LNG liquefaction or regasification terminals), distribution and marketing of natural gas in Mexico. Originally, such activities were exclusively reserved to Pemex-Gas y Petroquímica Básica (PGPB), one of the four operating subsidiaries of Pemex. In that same year, the Natural Gas Regulations were published by the government, implementing the liberalisation. In 1998 new environmental norms calling for the use of low-sulphur fossil fuels became effective, making natural gas the best choice for end-users, particularly for industrial customers. A new federal agency was created in order to enforce the natural gas and electricity laws and regulations: the Energy Regulatory Commission (CRE).

The exploration and production of natural gas has been exclusively entrusted to Pemex Exploración y Producción (PEP) (the most important operating subsidiary of Pemex), and the supply of natural gas within Mexican territory has been entrusted to PGPB, which in turn also competes with private entities in the natural gas transportation and marketing segments. Pemex does not participate in the natural gas distribution business. In 1995, when the Mexican government finally decided to use and consider natural gas as an efficient, safe, environmentally friendly fuel, the federal government decided to encourage the use of natural gas not only through the publication of 'clean air' laws and norms, but also through the establishment of local distribution companies (LDCs), legally compelled to 'gasify' a specific geographic zone in Mexico.

The use of natural gas in Mexico, on the other hand, has been primarily prompted by the IPP programme launched by the Comisión Federal de Electricidad (CFE), the national electricity

utility controlled by the federal government, and its decision to convert several power plants from fuel oil to natural gas operation. Under this IPP programme, which began in 1997, the winning bidder (all bidders being foreign developers) is required to build and operate a gas-fired combined-cycle power plant for 25 years, whose anchor tenant is the CFE. Up to this date, 20 projects have been awarded so far with a total aggregating capacity of 10,387MW, and more projects are currently subject to bid under different schemes for an aggregate load of 2,216.4MW. Thus, power development in Mexico is forcing an increase in natural gas production in Mexico, and to that extent the opening of Mexico's upstream market in light of Pemex's inability to increase natural gas production. Natural gas demand in Mexico is expected to grow over the next eight years by around 3.3 per cent yearly, with an annual demand growth of 5.1 per cent for power plants. Imports of natural gas have grown by around 28 per cent during the last five years, mainly due to the fuel requirements of the power plants. Pemex will be required to substantially increase the current production of natural gas (ie, 5.3 billion cubic feet (Bcf) per day) just in order to keep imports in check (ie, by 2013, 7.6Bcf per day for local production, 2Bcf per day for imports). Mexico is trying to meet the increasing demand not only through imports (which includes, the installation of LNG regasification terminals in Ensenada, Altamira, and Manzanillo), but also with an upstream programme aimed at developing dry gas in the Burgos basin (located near the Texas border) through the implementation of the so-called multiple services contracts (MSCs), which were awarded through international bids; an important effort to increase gas production in the Chicontepec field and shallow waters to compensate the expected decrease of production in the Cantarell field; and the initiation of exploration activities in deep waters. More than 70 per cent of the natural gas produced in Mexico is associated gas, and most of Pemex's production is offshore.

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## Policy and legal framework

- 2 What is the statutory framework for the domestic natural gas sector?

According to articles 27 and 28 of the federal Constitution:

- the ownership of all subsoil domestic hydrocarbons (including natural gas) is permanently vested in the Mexican state;
- no concessions are allowed for the exploration and exploitation of domestic hydrocarbons; and
- the development of the 'petroleum industry' is exclusively reserved to the Mexican state.

The 1958 Petroleum Law went beyond the Constitutional mandate by expanding the exclusivity of the federal government in

the petroleum industry, by including almost all of the activities related to the oil, gas and petrochemical industry (from E&P to the first-hand sale of oil, gas and by-products), creating a vertically integrated monopoly in favour of Pemex.

In 1992, the Mexican Congress enacted the Organisational Law of *Petróleos Mexicanos* and Subsidiary Entities, incorporating its four operating arms, one for each of the main areas of the petroleum industry: PEP, PGPB, Pemex-Refinación, and Pemex-Petroquímica. Currently, all of the natural gas produced by PEP is sold to its sister operating subsidiary, PGPB, which currently controls the largest transportation system in Mexico.

In 1995, when Mexico started the liberalisation of its natural gas industry allowing private participation, the president issued the Natural Gas Regulations, whose main purposes are, on one hand, to regulate the participation of the government, through PGPB, in the transportation and marketing of natural gas, and on the other hand, to foster, implement and regulate the participation of private companies in the midstream and downstream sectors. As a result of the new framework, PGPB became, among others, a transporter of gas, subject in principle to the same market rules as new private transporters coming into the market. By the same token, also in 1995, the Law of the Energy Regulatory Commission was promulgated and vested upon such federal agency broad powers and authority to regulate the natural gas and electricity industries. The CRE is a federal agency created in 1994, in charge of enforcing the Natural Gas Regulations, granting and enforcing permits for the generation and import of power by private parties, and regulating certain other power-related activities.

With respect to the natural gas industry, the main powers given to the CRE are the granting and enforcement of permits for the distribution, transportation and storage of natural gas, the approval of the terms and conditions governing all natural gas regulated services (including Pemex's gas supply services), the issuance of the methodologies for the calculation of domestic gas prices and the rates payable to suppliers of natural gas regulated services, the approval of model agreements for the provision of such services, the issuance of administrative regulations (directives and norms) in order to regulate natural gas-related activities, and imposition of penalties related to natural gas activities.

The Ministry of Energy (SenEr) is in charge of the national energy policy. SenEr, however, does not grant or enforce any governmental permits regarding the development of the natural gas industry.

**3** What is the government's policy for the domestic natural gas sector and which bodies set it?

The federal government is looking to foster the participation of the private sector in the natural gas industry and increase the production of natural gas.

Government policy is set by the Mexican president in compliance with the applicable laws and regulations, through SenEr, the CRE and the Ministry of Finance. National energy policy is required to be set within the first six months of the beginning of each presidential term (ie, a six-year term). The CRE, on the other hand, through the publication of directives, norms and resolutions, and the regulation of prices, rates and services, is the most important policymaker in the natural gas midstream and downstream arena. The CRE's directives and norms are administrative regulations that do not require Congressional action to be issued (not even presidential action is required); CRE norms (*Normas Oficiales Mexicanas*) are technical standards applicable

to the gas industry; the CRE itself may amend the directives and norms it issues. Such directives currently regulate specific activities such as gas pricing, rates, insurance, reporting obligations, accounting, determination of geographic zones, first-hand sales of gas, and others.

**Regulation of natural gas production**

**4** What percentage of the country's energy needs are met directly or indirectly with natural gas and LNG? What percentages of the country's natural gas needs are met through domestic production and imported production?

Domestic production of natural gas for 2008 available to the market is in the order of 6.7Bcf per day. Natural gas imports for 2008 are expected to reach 1.2Bcf per day, representing around 17 per cent of the total amount of natural gas consumed in Mexico. SenEr believes that imports will cover around 24 of national requirements by 2013, despite Pemex's attempts to rapidly increase natural gas production. Such imports will be mainly covered by the three LNG regasification terminals: one in Ensenada, Baja California for 1Bcf per day; one in Altamira, Tamaulipas for 500 million cubic feet per day, and the third in Manzanillo, Colima, for 500 million cubic feet per day. Most of the LNG capacity to be built in Baja California will be earmarked for California, US, and the three terminals are expected to be expanded at the mid or long-term basis.

**5** What is the ownership and organisational structure for production of natural gas (other than LNG)?

Since the Mexican State is the only entity allowed to pursue E&P activities in Mexico, the organisational structure remains completely controlled by Pemex through PEP. Nonetheless, Pemex is allowed to develop the 'petroleum industry' through the execution of contracts with private companies, subject to Mexico's government procurements laws and other regulations, and international treaties such as chapter X of NAFTA.

Pemex is looking to increase natural gas production through the execution of incentive-based contracts with private companies (eg the MSCs as indicated above). SenEr is also reviewing the best way to amend the current legislation aimed at allowing alliances with the private sector in the upstream arena. Depending the scope of the proposed bill, a Constitutional amendment may not be needed. Constitutional amendments require a supra majority vote of Congress (two-thirds of the representatives and senators of Congress), and a simple majority vote of the 32 local legislatures.

The importing of natural gas is not a regulated activity; any person may import gas into Mexico. Needless to say, the largest importer-shipper of natural gas in Mexico is Pemex and just recently, CFE. Currently, there are 15 pipeline interconnections across the US-Mexico border. No import duties are now payable for the importation of natural gas into Mexico.

**6** Describe the regulatory framework and any material governmental or administrative authorisations applicable to natural gas exploration and production.

By virtue of the legal monopoly established by the Mexican Constitution and the Petroleum Law, PEP is the only entity authorised to carry out the exploration and production of natural gas in Mexico; therefore, all activities related to exploration and production of natural in Mexico are performed either by: PEP itself, or private parties specifically contracted by PEP to carry out a

certain activity, under the control and supervision of the former, and subject to government procurement laws and regulations, and international treaties.

PEP's exploration and production activities are subject to the previous granting of an 'assignment' of land by SenEr. These 'assignments' are authorizations granted by SenEr to PEP, upon request of the Mexican president or with his consent, to explore and exploit the subsoil of certain lands. Pemex may be granted an unlimited number of assignments, each of which shall refer to a continuous surface of at least 100,000 hectares. Assignments have an initial term of 30 years, renewable upon request by PEP. Preliminary exploration activities, however, are only subject to a permit, granted also by SenEr.

The technical aspects of PEP's gas exploration and production activities, on the other hand, are regulated by the Regulations for Petroleum-Related Works (Reglamento de Trabajos Petroleros).

#### 7 How does the government derive value from natural gas production?

Since the Mexican state has a complete monopoly over the production of natural gas in Mexico, the value of natural gas is directly related to the income obtained from its sale.

### Regulation of natural gas pipeline transportation and storage

#### 8 What is the ownership and organisational structure for pipeline transportation and storage of natural gas?

Most of the gas transportation pipelines in Mexico are owned and controlled by Pemex, who owns and operates two pipeline systems: one comprised of 8,704km of fully interconnected trunklines (the National Pipeline System), and another isolated system in the northwestern part of Mexico, known as the Naco-Hermosillo system, whose 339km trunkline is interconnected to El Paso's pipeline system in Arizona, US. Nonetheless, and since the opening of the midstream industry in late 1995, many other transportation systems have been and are being developed by private players such as Sempra, El Paso, Kinder Morgan, Gaz de France, Transcanada, Fermaca and others, including private equity funds associated with local developers.

No storage projects (either through salt caverns or exhausted fields) have been implemented yet in Mexico, other than the LNG regasification terminal in Altamira, which is already operating, and the LNG terminals in Ensenada and Manzanillo, which are currently under construction.

#### 9 Describe the regulatory framework and any material governmental or administrative authorisations applicable to the construction, ownership and operation of natural gas transportation pipelines and storage facilities.

In order to build and operate a natural gas transportation system or a storage facility (eg, liquefaction or regasification terminals), different types of governmental permits and authorisations are required from federal and local authorities, the most important being the permit granted by the CRE, the authorisations required under the environmental laws, and the real estate rights required by the project.

#### Natural gas transportation/storage permit

Pursuant to the Natural Gas Regulations, natural gas pipeline transportation services are subject to a federal permit granted by the CRE, upon demonstrating to the agency the experience and capabilities of the relevant transportation company, both tech-

nical and financial, the feasibility of the pipeline project to be implemented, and the approval of the proposed rates and terms of service. Transportation permits operate as 30-year renewable quasi-concessions, and impose to the relevant transporter a series of regulatory obligations.

There are two types of natural gas transportation permits: open-access and self-use. Open-access transportation permits are granted to those transmission systems that will serve very much like a utility: they are compelled to grant open access on a not unduly discriminatory basis, to any shipper that requests the service, provided there is available capacity in the system and the parties reach an agreement on the subject matter, as provided under the General Terms of Service approved by the CRE (GTS). For obvious reasons, open-access transportation permit holders are heavily regulated and supervised by the CRE. Self-use transportation permits, on the other hand, are exclusively granted to end users or a group of end users organised in a consumption club company, whose transmission systems will not be providing open-access services.

There are no restrictions in terms of length and width of the pipeline or the capacity of the system, or the number of end-users that can form part of a self-use gas consumption club company. Since there are no local utility agencies or commissions in Mexico, the CRE is in charge of granting both interstate and intrastate gas transportation permits.

Unlike gas distribution permits, transportation companies are not obligated to gasify any pre-determined geographic zone or to connect any given number of users. Thus, gas transportation permits are granted by the CRE on a non-exclusive basis.

The regulations for natural gas storage are similar to those applicable to transportation: there are also self-use and open access storage permits with similar obligations to its transportation counterparts.

The granting of an open access transportation or storage permit (ie the approval of the technical and safety aspects of the project, rate schedule and the GTS), takes from five to 10 months, depending on the complexity of the project.

#### Environmental authorisations

The developer shall obtain the authorisation of environmental impact assessment report and risk study from the Ministry of Environment and Natural Resources (SEMARNAT). The filing review process normally takes from four to six months.

#### Real estate rights

The developer shall negotiate and obtain all rights of way (ROW), pipeline-crossing authorisations, and real estate rights necessary for the construction and operation of the pipeline or the storage facility.

#### 10 How does a company obtain the land rights to construct a natural gas transportation or storage facility?

Through the negotiation and execution of ROW contracts or easement agreements with the respective servient tenements, or through the filing of a ROW permit application if the land is owned by the government. The same applies to securing a site for a storage facility or metering station (ie option, purchase or lease agreements need to be negotiated, signed, notarised and registered), provided that possession of public land normally requires the granting of a concession, which in some instances, is subject to public tender.

The ROW contracts and servitude agreements depend on the type of land to be affected: private, public or agrarian. Private property in Mexico is subject to state law. Accordingly, the Civil Codes of the relevant states where the facilities are to be built are the statutes that will govern the terms under which the developer will negotiate the corresponding ROW and real estate rights for the construction of the pipeline or the storage facility (eg LNG terminal). Public property is governed by different statutes, depending on the type of owner (ie, federal, state or municipal owner or public instrumentality). In this type of situation, and instead of executing an easement agreement, the developer will be filing and obtaining a ROW permit. The ROW permit may be a pipeline crossing permit or a right-of-way permit, or both.

Agrarian property is subject to federal law under the Agrarian Law. ROWs granted over Agrarian property is documented through easement agreements; agrarian easement agreements are cumulatively subject to the Agrarian Law and the Federal Civil Code.

The holder of an open-access natural gas transportation permit has the right to demand the eminent domain over a servient tenement for the construction and installation of pipelines. Nonetheless, such statutory right has not been invoked because of the ability of the land owners to easily enjoin the condemnation process through a court order; as a result, gas transportation companies have decided to use such eminent domain right only as a bargaining tool for the negotiation of voluntary ROW contracts or easement agreements.

**11** How is access to the natural gas transportation system and storage facilities organised?

All transportation/storage companies (other than self-use transportation/storage companies) are obligated to provide open access to their systems on a non-discriminatory basis (provided there is available capacity in the system), to any person that requests their transportation services, as required under the relevant GTS.

The GTS is normally an all-encompassing document which includes the type of services offered by the transportation or storage company, the terms and conditions regarding the provision of such services (including imbalances procedures and gas quality provisions), and the rates approved by the CRE. Each GTS is available at the CRE, and can only be amended upon the prior approval of the CRE. Issues omitted or not adequately covered under the relevant GTS may be addressed in the gas transportation agreement or the gas storage-regasification agreement (in the case of LNG regasification terminals) to be signed by the permittee and the user. A template of such agreement is attached to the relevant GTS, which agreement incorporates by reference the provisions stipulated under the GTS.

All gas to be injected into a Mexican pipeline (transportation and distribution) or storage facility (LNG regasification terminal) is subject to a Gas Quality Norm published by the CRE.

**12** To what degree are pipeline systems interconnected with one another and by what means is cooperation between such systems established?

Despite liberalisation efforts, PGPB continues to be largest transporter and supplier of gas in Mexico. Therefore, a very large amount of distribution and transportation systems are interconnected with PGPB's pipeline system.

The Natural Gas Regulations, the CRE's Directive on Pass-through Prices and Rates, and each GTS govern the cooperation

between pipelines, which is reflected in an interconnection agreement or a connection agreement, and in some instances, in an operation balancing agreement. All of the open-access pipelines are required to allow the interconnection or connection to their systems, to the extent there is available capacity, the proposed tapping is technically feasible, and the parties agree on the terms and conditions of such tapping.

**13** Can customers, other natural gas suppliers or an authority require a pipeline or storage facilities operator to expand its facilities to accommodate new customers? If so, who bears the costs of interconnection or expansion?

Yes, transporters are required to expand or extend their systems upon request by any potential shipper whenever the transportation service being requested is technically and economically feasible (whether through pipeline expansion, looping or by adding compression). Such obligation is subject, however, to the execution by the parties of an agreement to cover the cost of the pipelines and other facilities constituting the relevant extension or expansion. As to who bears the cost of the expansion or extension of the pipeline system, that would depend on the specific conditions of each project. Depending on the relevant transportation permit, the requested expansion or extension may be subject to a rate case before the CRE, whereby the transporter may be required to request the modification of its rate schedule (eg, incremental rate, rolled-in rate, marginal cost methodology), as a condition precedent for the expansion or extension of the facilities. As a general rule, the CRE's Directive on Pass-through Prices and Rates allows the recovery of the costs associated to extensions or expansions through rolled-in rates only if the result is a reduction of the applicable maximum regulated rates.

There is no statutory obligation to expand or extend the system with respect to open access storage facilities. Perhaps at the time of drafting the Natural Gas Regulations, the draftsmen never imagined that LNG regasification terminals were going to be developed some years after.

The CRE is requesting the implementation of an open season whenever a pipeline or LNG regasification terminal is being expanded.

**14** Describe any regulation of the prices or terms of service for pipeline or storage services.

Rates for the provision of pipeline and storage services are regulated by the CRE pursuant to the Natural Gas Regulations, and the CRE's Directive on Pass-through Prices and Rates, which was published in December 2007 to replace a previous CRE directive regulating rates. The terms of service of each open access natural gas transportation, distribution or storage system are regulated by the GTS approved by the CRE for each one of them. (See questions 17 and 20.)

**15** Describe any statutory and regulatory requirements applicable to the processing of natural gas to extract liquids and to prepare it for pipeline transportation.

Pursuant to the Petroleum Law, domestic natural gas processing is exclusively reserved to Pemex through PGPB. Processing of imported natural gas may be undertaken by private companies, although no one has undertaken such activity yet. The same situation occurs with the ability to process natural gas brought from Pemex or its international trading arm, PMI Internacional.

In processing natural gas, one should be mindful that any natural gas to be injected into a pipeline or storage system in Mexico must meet the CRE's Gas Quality Norm.

**16** Describe the contractual regime for transportation and storage.

In principle, gas transportation, distribution and storage service providers shall abide by the terms of service and model contracts established in their respective GTS, as approved by the CRE; however, service providers and shippers may include in their contracts 'special conditions' that detour from the terms of service embodied in their GTS, to the extent those special conditions do not constitute unduly discriminatory practices or violations to public policy. Negotiated rates are also permitted to the extent they are not unduly discriminatory, but as a general rule, negotiated rates shall not exceed the maximum regulated rates approved by the CRE for each system.

In addition, open-access service providers are required to register their model contracts with the Federal Consumer Protection Agency (PROFECO), which also verifies the adequacy of the proposed contractual terms.

### Regulation of natural gas distribution

**17** What is the ownership and organisational structure for the local distribution of natural gas?

Gas distribution is subject to the issuance of a permit by, and supervision of, the CRE.

Both open-access natural gas distribution and transportation companies are heavily regulated by the CRE. As common carriers subject to open-access and unbundling rules, transportation and distribution companies are generally barred from vertical integration if they are serving the same geographic zone. Open-access gas transportation and distribution services are subject to 'maximum regulated rates' determined based on the methodology established in the CRE's Directive on Pass-through Prices and Rates. Gas marketers are not subject to permit by the CRE, and gas suppliers, transporters and distributors are free to participate in such marketing companies.

As a general rule, the first distribution permit for a designated geographic zone by the CRE should always be awarded by the CRE through an international tender. In exchange for the legal commitment to gasify a predetermined geographic zone through the imposition of a minimum number of end-users to be connected by the fifth year of operation of the relevant LDC, and subject to compliance with the regulated rates, the CRE grants to the winning LDC a 30-year distribution permit, renewable for periods of 15 years thereafter, with 12 years of exclusivity as of the issuance of the permit. This exclusivity is only granted in respect of the right of the LDC to distribute the commodity within the pre-determined geographic zone, and not with respect to its marketing. Thus, marketers are entitled to sell gas to end-users located in an LDC zone, subject to a maximum price approved by the CRE. Despite the exclusivity granted to LDCs, end-users are entitled to physically bypass the LDC upon compliance with certain requirements embodied in the Natural Gas Regulations, and the obtaining of a self-use gas transportation permit.

The CRE has been successful in granting LDC permits since 1996; currently, the CRE has awarded more than 21 LDC permits covering the most important cities in Mexico. The determination, expansion and modification of a geographic zone is established by the CRE in accordance with the CRE's Directive on Geographic Zones.

**18** Describe the regulatory structure and governmental or administrative authorisations required to operate a distribution network. To what extent are gas distribution utilities subject to public service obligations?

See questions 9 and 17.

**19** How is access to the natural gas distribution grid organised?

Access to the distribution grid is regulated substantially in the same way as access to open access transportation pipelines (see question 11).

**20** Describe any regulation of the prices for distribution services. In which circumstances can a rate or term of service be changed?

See question 17. All users accessing a distribution system shall pay the respective LDC the corresponding interconnection fee, which is previously approved by the CRE and included in the relevant GTS, as part of the LDC's rate schedule. Such rate schedule is published in Mexico's Federal Register, and is subject to the adjustment mechanisms provided under the Directive on Pass-through Prices and Rates. According to these mechanisms, such regulated rates are subject to annual adjustments based on Mexico-US inflation and currency exchange variations; and after every five years of operation the rate schedule shall be reviewed by the CRE and the LDC based on the methodology established under the CRE's Directive on Pass-through Prices and Rates (which includes efficiency factors), considering the business plan, investment commitments, efficiency factors and other considerations included in the distribution or transportation permit. Propane and fuel oil are still and will continue to be widely used in Mexico (Mexico is the largest residential consumer of LPG of the world); therefore the CRE is keen to maintain transportation and distribution rates at a very competitive level with respect to other competing fossil fuels.

The rate schedule cannot be modified by the LDC unless it has been approved by the CRE. Evidently, the CRE is normally reluctant to accept the modification of a rate schedule unless it is in order to lower such rates; however, the regulation embodied in the new Directive on Pass-through Prices and Rates does contemplate a number of cases in which LDCs and transporters are allowed to request an increase of their maximum regulated rates, mainly as a result of regulatory and standardization changes and unforeseen investments required to protect the integrity of their ROW or the safety of their systems. Changes in the applicable tax regime, on the other hand, are treated as pass-through costs.

**21** May the regulator require a distributor to expand its system to accommodate new customers? May the regulator require the distributor to limit service to existing customers so that new customers can be served?

Yes, LDCs have the same statutory obligations to expand or extend their grid within its designated geographic zone, as the ones imposed to an open access transportation permit (see question 13).

Under the Law of the Energy Regulatory Commission, the CRE has broad powers and authority to regulate the efficient development of the midstream and downstream natural gas industry; under such premise, and pursuant to other statutory provisions, the CRE may require an LDC to limit service to existing customers in order to serve new customers. This situation, however, has not occurred yet in Mexico.

**22** Describe the contractual regime in relation to natural gas distribution.

See question 16.

### Regulation of natural gas sales and trading

**23** What is the ownership and organisational structure for the supply and trading of natural gas?

Gas trading is not subject to a permit, and gas marketers are free to participate in gas distribution and transportation permits, to the extent such vertical integration is not considered an anti-competitive practice or a punishable concentration by the Federal Competition Commission (FCC). The price of domestic natural gas (which due to the legal monopoly granted to Pemex can only be produced and supplied by Pemex) is regulated by the CRE pursuant to the 1996 Directive on Pricing and Rates. Domestic gas is subject to a liquid market price index (Houston Ship Channel), subject to a net back procedure. The marketing of domestic gas after a first-hand sale by PGPB has occurred, and the sale of imported gas, are not subject to regulation under Mexican law. PGPB continues to be the largest gas marketer in Mexico, mainly due to the fact that it is the only producer of natural gas and the largest transporter.

**24** To what extent are natural gas supply and trading activities subject to governmental oversight?

Since no permit or authorisation is required to undertake trading activities of natural gas, the oversight of governmental authorities is negligible, except for the case of Pemex, due to its evident market power, and the fact that Pemex is the only producer and supplier of domestic natural gas in Mexico, and the largest importer, trader and transporter. Pemex gas trading activities are regulated by and subject to the scrutiny of the CRE, through the 1996 CRE Directive on Pricing and Rates, the CRE Directive on First-Hand Sales, PGPB's General Terms and Conditions for First-Hand Sales, and indirectly, PGPB's gas transportation permit.

CRE has not been able to introduce strong affiliated-marketing regulations. Since there are no strong Chinese-wall rules, the fact that marketing and transportation activities of Pemex remain under the same affiliate (ie, PGPB), PGPB is the largest shipper within PGPB transportation system, and PGPB's open access remains a chimera.

**25** How are physical and financial trades of natural gas typically completed?

Domestic gas sales by PGPB are conducted pursuant to the model agreements that have been authorised by the CRE under PGPB's General Terms and Conditions for First-Hand Sales, which contemplate a series of service methods with different levels of flexibility in terms of gas supply scheduling and nominations. Gas supply contracts related to imported gas are not subject to regulation, and therefore, the parties are free to establish the applicable terms and conditions.

**26** Must wholesale and retail buyers of natural gas purchase a bundled product from a single provider? If not, describe the range of services and products that customers can procure from competing providers.

No, under Mexican law all users (wholesale or retail) are free to purchase gas on an unbundled or bundled basis; in other words, users and end-users in Mexico are free to purchase from any supplier or marketer, and become shippers in, and retain the service from, any open-access transportation or distribution company, or purchase the natural gas from the distribution company.

### Regulation of liquefied natural gas (LNG)

**27** What is the ownership and organisational structure for LNG, including liquefaction and export facilities and receiving and regasification facilities?

Although Mexico is rich in natural gas reserves, there are no liquefaction-export facilities, and because of the increasing demand for natural gas, three major LNG regasification terminals are being operated or developed in Mexico (see questions 1 and 4). As discussed above, liquefaction and regasification facilities are subject to a storage permit by the CRE. The design, construction, safety, operation and maintenance is subject to a Mexican Official Norm issued by the CRE.

**28** Describe the regulatory framework and any material governmental or administrative authorisations required to build and operate LNG facilities.

See question 9. Moreover, LNG regasification terminals require concessions granted by SEMARNAT and the Ministry of Transportation and Communications if they are not located within a pre-established industrial port.

**29** Describe any regulation of the prices and terms of service in the LNG sector.

See question 14. Pursuant to the CRE's Directive on Pass-through Prices and Rates, the applicant of an open access gas storage permit is allowed to propose the methodology to be used for purposes of determining the rates that will be charged for the relevant storage services, but such methodology shall be consistent with the general principles followed by the rate methodology prescribed for open access transportation permits, mutatis mutandi (eg, maximum rates, appropriate allocation of costs among the different services being offered, reasonableness of the proposed rate of return (which is not a guaranteed rate of return), periodic reviews and application of efficiency factors).

### Mergers and competition

**30** Which governmental body may prevent or punish anti-competitive or manipulative practices in the natural gas sector?

Unlike some other jurisdictions, antitrust matters in the natural gas midstream and downstream sectors are not exclusively regulated and enforced by the CRE; the FCC has concurrent jurisdiction in most of the natural gas activities that may be punishable from the antitrust point of view.

The FCC has concurrent jurisdiction with the CRE in four areas: operation of the system, regulated rates, merger control, and refusal to deal, predatory and discriminatory pricing, cross subsidies, tied sales and exclusive dealings, among other punishable monopolistic practices.

Pursuant to the Natural Gas Regulations, the commercial operation of the open access pipeline or storage permit is subject to a 'no objection' resolution of the FCC. As a matter of law, each applicant is required to include as a part of its CRE permit application a copy of the 'notification of interest' filed by such applicant before the FCC. Although this type of filing to the FCC does not amount to a pre-merger notification report, it may become data-intensive and heavily scrutinised by the FCC, depending on the type of project being pursued, and whether the involved parties have substantial power in the relevant market.

Open-access pipeline and storage permits, on the other hand, may not be required to abide by their GTS and rate schedules if the FCC declares the existence of effective competition conditions within the relevant market. Such declaration may be initiated

### Update and trends

#### New Directive on Pass-through Prices and Rates

In March 1996, the CRE issued the Directive on the Determination of Prices and Rates for Natural Gas Regulated Activities (the 1996 Directive). Its purpose was twofold: it established the methodology for the determination of prices for Pemex's first-hand sale of domestic natural gas; and the regulated rates applicable to natural gas transportation, distribution and storage services.

The rate methodology established under the 1996 Directive was based on a maximum revenue yield cap, which was then translated into regulated rates applicable to each type of service offered by the relevant permittee. However, the experience gained by the CRE after 10 years of applying the methodology envisioned in the 1996 Directive dictated the need to move from an overall maximum revenue yield cap methodology to a methodology based on individual maximum regulated rates for each type of service offered by the permittees, and make a series of adjustments to the regulation. One of the main reasons for such a move was the difficulties faced by distributors in developing residential pipeline networks beyond their anticipated projections, which led distributors to exceed their overall maximum revenue yield cap. As a result, in December 2007, the CRE issued a new Directive on the Determination of Rates and Pass-Through Prices for Natural Gas Regulated Activities (the Directive on Pass-through Prices and Rates), which regulates only the methodologies applicable for the determination of prices and rates related to natural gas transportation, distribution and storage services (natural gas first-hand sale prices are still regulated by the 1996 Directive).

In addition to the new regulation based on maximum rates, the new Directive on Pass-through Prices and Rates

includes more stringent and detailed provisions regulating the manner in which permit applicants and permittees are required to calculate and submit their cost base and proposed rate of return, as well as provisions regulating the various adjustments to which regulated rates may be subject. Likewise, this new directive is intended to foster the CRE's authority to review, approve and supervise the permittees' business plans and investments.

#### Energy reform

After the initial steps that were taken in 2007 by amending the tax regime to which Pemex is subject, much has been said over the first quarter of 2008 about the need to amend the legal framework of the oil and gas sector to permit Pemex to access new technologies and better contracting schemes in order to be capable of undertaking E&P activities in deep waters. However, the actual terms of the bill of amendments that the government intends to submit to Congress have not been disclosed yet. At this time, there is only certainty about the fact that the proposed amendments will not entail a Constitutional amendment to allow direct private investment in E&P and instead, the proposed reform will likely be based on changes to the Petroleum Law providing more flexibility in terms of the contracting schemes that Pemex will be authorised to implement. It is currently difficult to predict the final outcome of this debate, which is still in its early stages and is highly sensitive in Mexico.

The CRE's authority is expected to be expanded and strengthened; it is also expected to be in charge in liberalising liquid terminals and pipelines, which is currently under the monopoly of Pemex.

by any interested party or by the FCC *sua sponte*, and may be determined without the intervention of the CRE. Because of the conditions of the Mexican natural gas market, the fact that production of natural gas is exclusively reserved to Pemex, and that the supply and transportation of natural gas is mainly controlled by Pemex, the possibility of the FCC deregulating the rates of natural gas services seems to be very unlikely to occur in Mexico within the next couple of decades.

As discussed above, the transfer of an open-access pipeline or storage permit, or the transfer of their assets, is subject to the prior approval of the CRE, and probably, to the prior authorisation of the FCC if the relevant transaction exceeds one of the monetary thresholds established under Mexico's merger control rules. Both agencies may object to the transaction or impose conditions or performance requirements on the transfer. Finally, the FCC may impose sanctions on open-access permit holders and other related parties (eg, an affiliated marketing company), upon determining the existence of a punishable conduct (such as a refusal to deal when the permittee unduly denies open access, or undertakes predatory pricing, imposes tie-in requirements or other kinds of monopolistic practice), causing harm to other economic agents vertically or horizontally located. The expansion or modification of the geographic zone of any given LDC is subject to prior approval of the FCC.

Since its creation in 1993, the FCC has been slowly learning about the energy sector and the important role this federal agency has to play in enforcing antitrust laws and regulations in a market that, by its own nature and condition, is *per se* monopsonistic, but, more importantly, because of the unparalleled monopolistic situation that the Mexican energy industry has with two vertically-integrated monopolies controlled by the Mexican government: Pemex (oil, gas and basic petrochemicals), and CFE (power).

**31** What substantive standards does that governmental body apply to determine whether conduct is anti-competitive or manipulative?

Two main sets of rules regulate whether a conduct is anti-competitive in the midstream and downstream natural gas arena: the Natural Gas Regulations (including all of the CRE directives, resolutions, norms and the applicable GTS and rate schedule), and the Competition Law, its implementing regulations and the FCC's resolutions. For further discussion, see question 30.

**32** What authority does the governmental body have to preclude or remedy anti-competitive or manipulative practices?

Both the FCC and the CRE may preclude and/or remedy anti-competitive practices in the natural gas sector within the scope

of their competence. The main tool is the imposition of hefty fines, and even in some cases the revocation of the permit on the part of the CRE. Also, the FCC and/or the CRE may require the relevant economic agent/permittee to cease the anti-competitive practice, and the FCC may even order the divestment of assets. Once such sanctions have been conclusively established by the FCC, the relevant injured party may use such resolution for a prima facie case for the payment of actual damages and lost of profits before a Mexican court.

End users, on the other hand, are entitled to cumulatively pursue a claim before Mexico's Federal Consumer Protection Agency (PROFECO), if the pipeline or storage service provider violates the Federal Law of Consumer Protection.

- 33** Does any government body have authority to approve or disapprove mergers or other changes in control over businesses in the sector or acquisition of production, transportation or distribution assets?

Mexico's Competition Law requires that certain mergers or transfers (known in Mexico as 'concentrations') be notified to the FCC prior to closing. In some cases, the transaction cannot occur until clearance is obtained from the FCC. For purposes of the Competition Law, a 'concentration' includes any transaction or series of transactions which result in the accumulation or concentration of capital from two or more economic agents, and includes mergers, asset and stock acquisitions, as well as the formation of new companies, where the economic thresholds established by the Competition Law are met. The FCC reviews the power over the relevant market of the parties involved, and the probable anti-competitive effects of the change in control or merger. Typically, the resolution of the FCC takes two to three months, approximately.

- 34** In the purchase of a regulated gas utility, are there any restrictions on the inclusion of the purchase cost in the price of services?

The purchase cost of a regulated gas utility cannot be included in the price of the services, since the regulated gas utility can only modify its rate schedule under the conditions described above. If you acquire a regulated gas utility, you will have to live with its rate schedule, and be subject to the CRE reviews and adjustment mechanisms.

- 35** Are there any restrictions on the acquisition of shares in gas utilities? Do any corporate governance regulations or rules regarding the transfer of assets apply to gas utilities?

There are no change in control rules embodied within the Natural Gas Regulations. Accordingly, there is no statutory restriction to acquire the controlling interest in a regulated gas utility, except for the vertical-integration prohibition established under the Natural Gas Regulations with respect to transporters and distributors serving the same geographic zone. Nevertheless, the CRE is beginning to introduce within the open access permits the requirement to obtain the prior approval of the CRE in case of a change in control of the permittee. Likewise, amendments to a natural gas-related permit requested as result of a change in control of the permit holder do require the CRE's prior assessment and approval, which is another way that the CRE has to review a proposed transfer.

The CRE is keen to make sure that new owners of the utility meet the same technical, financial and legal requirements that the previous shareholders were required to prove to the CRE as part of the approval of its permit. Under the Natural Gas Regulations, on the other hand, one cannot transfer an open access permit without transferring the corresponding assets. The transfer of an open access permit, or the assets, requires the prior approval of the CRE, and depending on the characteristics of the transaction, the approval of the FCC would also be required, and the transfer would then be subject to the waiting periods established under the Competition Law. Since utility assets are attached to the permit, the assignment of other permits related to the assets should be obtained also as part of the transfer.

#### International

- 36** Are there any special requirements or limitations on foreign companies acquiring interests in the natural gas sector?

No, there are no special requirements or limitations on acquisitions of interest in the natural gas sector by foreign companies, except where the foreign company intends to acquire more than 49 per cent of the capital of the Mexican company, and such company has more than US\$220 million in assets, in which case the prior approval of the National Commission on Foreign Investments may be required.

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**37** To what extent is regulatory policy affected by treaties or other multinational agreements?

NAFTA provides very general provisions regarding the liberalisation of the energy sector, the use of performance contracts for the exploration and exploitation of oil and natural gas, and government procurement rules which may become relevant if providing services or selling goods to Pemex or CFE.

Mexico is a member of the OECD, and is involved in the International Energy Agency through the Committee of Non-Member Countries; as a result, Mexico must follow the policies established by such organisations to the extent permitted by Mexican law. Mexico has signed or ratified more than 26 bilateral investment treaties and 38 double taxation treaties, and is a signatory to the most important regional and multinational treaties on private international law.

**38** What rules apply to cross-border sales or deliveries of natural gas?

Unlike other jurisdictions, there are no special permits (eg, a presidential permit) for the construction of a border-crossing pipeline, or the import or export of natural gas. If the border-crossing is with the US (as is normally the case), the developers shall obtain the authorisation of the Mexico–US International Boundaries and Waters Commission. Moreover, an authorisation by the Ministry of Finance is required in connection with the metering devices that will be used to determine the gas volumes being imported or exported.

#### Transactions between affiliates

**39** What restrictions exist on transactions between a natural gas utility and its affiliates?

No specific affiliate marketing rules have been implemented yet with respect to gas utilities, except in the case of PGPB, whose gas marketing arm is required to abide by specific rules whenever it acts as shipper of the National Pipeline System, which is operated by PGPB's pipelines division. In the case of PGPB's Naco-Hermosillo system, the CRE has prevented PGPB from becoming a shipper of its own system.

Other transactions among affiliates, on the other hand, are subject to the general principle of no undue discrimination embodied in the regulations, and the general rules established in the antitrust laws to prevent anti-competitive practices.

**40** Who enforces the affiliate restrictions and what are the sanctions for non-compliance?

Mainly the CRE, but see questions 30 to 32.