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Legal Update
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Mexican Energy and Infrastructure: What to Expect in 2019

Income and Expenses in the 2019 Federal Budget

The revenue budget estimated for 2019 is USD $307,266.3 million,[1] which represents 21% of Mexico's GDP. [2][3] The main source of income continues to be tax revenues (62.3% of total public revenue), whose collection represents 13% of the GDP. [6] The oil revenues of 2019 will represent 19.8% of the total budgetary revenues in the country. [2] The energy sector as a whole is expected to contribute 27.7% of the total federal revenue, with resources equivalent to USD $77,009 million. [2] [3]. Pemex revenues are estimated to be 10.4% higher in real terms by the end of 2019. [2] [5]

The public expenditure proposed for 2019 is also USD $307,266.3 million (6.0% higher in real terms than 2018). [2] [4] Government says that it designed the public spending plan around austerity and savings policies to channel more public resources to social needs and infrastructure spending. In order to finance priority projects—namely (1) the "Mayan Train", (2) the Transisthmian Corridor, (3) rural roads, (4) the modernization and rehabilitation of airport infrastructure, (5) Internet for All, (6) marginal neighborhoods and (7) the reconstruction plan [7]—sectors such as environment, agriculture, personal services and operating expenses reflect relevant cuts, and the discretional allocation of resources to the states (*Ramo 23*) and certain autonomous institutions such as the Energy Regulation Commission (*Comisión Reguladora de Energía*) and the Hydrocarbon National Commission (*Comisión Nacional de Hidrocarburos*) face significant reductions. [4] [6]

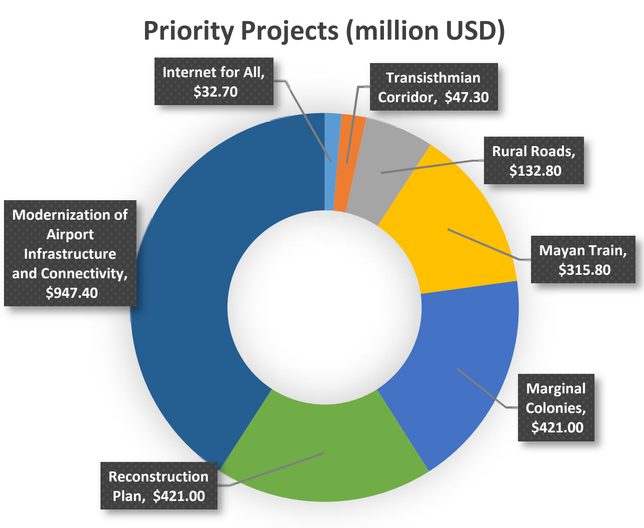

Figure 1. Federal Budget 2019

Public expenditure in the energy sector includes six departments and entities: (1) Pemex, (2) the Federal Electricity Commission (CFE), (3) the Ministry of Energy (SENER), (4) the Regulatory Energy Commission (CRE) and (5) the National Hydrocarbons Commission (CNH). However, Pemex and CFE will spend the largest share of the federal budget allocated to the energy sector. [4]

Public spending on energy matters in 2019 will prioritize the hydrocarbon sector, specifically exploration and refining. [4] The electric sector, despite receiving more resources through CFE, will be allocated less capital for generation through clean energies (including nuclear and hydroelectric) and transmission and distribution. [4] In line with this, SENER will prioritize hydrocarbon policy over others. [4]

Also in line with this, on January 25, 2019, CFE cancelled the Ixtepec-Yautepec Transmission Line tender (a high voltage DC transmission designed to have the capacity to transport up to 3,000 MW over 500 kV), stating that the project was not a priority for the current administration. [9]

Pemex

Pemex, Mexico's state-owned oil and gas company, will be allocated USD $24.5 billion of the country's 2019 federal budget, a 14.1% increase with respect to the amount approved in the 2018 budget. [2] [4] This allocation is considered necessary to meet the demand for petroleum and petrochemical products; to drill for and complete new wells and repair existing ones; and to provide hydrocarbon, petroleum and petrochemical logistics services in a sustainable manner. [4]

The government has three priorities for its 2019 investment in Pemex: [4]

1. Stabilize the production of crude oil, reversing the downward trend in the short term and increasing production in the future;
2. Rehabilitate the six refineries that make up the company's National Refining System (*Sistema Nacional de Refinación*), assuring the reliability of the crude process, which will allow increased production of refined products, especially gasoline and diesel, and thereby reduce Mexico's dependence on imported gasoline and diesel; and
3. Start construction of a new refinery (the seventh in the country) in Dos Bocas, Tabasco.

The government also will direct resources toward the maintenance of gas processing plants, ducts and ethylene and fertilizer facilities. [4]

The recently announced National Refining Plan (*Plan Nacional de Refinación*) and the National Plan for the Production of Hydrocarbons (*Plan Nacional para la Producción de Hidrocarburos*) aim to increase the production of (1) petroleum to 1.86 million barrels per day (mbd) by 2022 and (2) oil to 2.2 mbd by 2022. [8]

(For more information about Pemex plans and projects for 2019, please refer to Appendix A.)

CFE

CFE, Mexico´s state-owned power and energy company, will be allocated USD $3.2 billion of the 2019 federal budget, a 36% increase with respect to the amount approved in the 2018 budget. [2] [4] Through the 2019 program to maintain, rehabilitate and modernize the power generation infrastructure, resources will be used to ensure the availability and reliability of the power generation equipment, which will make approximately 5% more energy available to the market and increase thermal efficiency by 1.08%. [4]

The government has four priorities for its 2019 investment in CFE: [4]

1. Consolidate its new operating model and develop a productive business culture with effective talent management;
2. Accomplish the objectives of productivity and cost control, achieving a higher level of performance and becoming more cost-competitive;
3. Continue to evolve the business portfolio toward greater profitability and financial strength; and
4. Start the commercialization and transportation of gas to maximize the value of the pipeline network. (Renegotiation of gas supply agreements is expected to occur during 2019.)

For more information about CFE plans and projects for 2019, please refer to Appendix B.

SENER

SENER is one of the departments with the highest budget growth, increasing its resources by 961.2% (in total, USD $1,433 million). [4]

Regulatory Bodies

Energy regulatory bodies such as the Energy Regulatory Commission (*Comisión Reguladora de Energía*) and the National Hydrocarbons Commission (*Comisión Nacional de Hidrocarburos*) lost 31.1% and 30.3% of their resources, respectively. The programs most affected are Hydrocarbon Regulation and Permits (*Regulación y Permisos de Hidrocarburos*), Electricity Regulation and Permits (*Regulación y Permisos Eléctricos*) and the Hydrocarbons Promotion and Regulation Program (*Programa de Promoción y Regulación de Hidrocarburos*). [4] In line with this reduction, oil tenders and long-term clean electric auctions recently have been suspended.

II. INFRASTRUCTURE

The amount budgeted for infrastructure amounts to USD $37,444 million, which is 6.3% higher in real terms than 2018, representing 12.2% of the total federal budget and 2.8% of the GDP. [5]

Although this year the budget was increased with respect to the previous one by 17.4%, the increase is lower than that budgeted for each of the years 2014, 2015 and 2016. [5] That is to say, since 2014, the trend overall has been downward, decreasing as a percentage of GDP by 1.3 percentage points in five years. [5]

(For more information about Ministry of Communications and Transportation (SCT) plans and projects for 2019, please refer to Appendix C.)

Appendix A

PEMEX: WHAT TO EXPECT IN 2019

Budget Allocation

A) E&P (THE SUBSIDIARY THAT OBTAINED THE HIGHEST BUDGET OVERALL, WITH PROJECTS ALL ABOVE USD $900 MILLION)

These projects aim to replace the fall in Cantarell production and stabilize and eventually increase oil production overall in a profitable, safe and sustainable manner.

Pre-investment in studies for new exploration areas, Federal Zone (USD $1,106 million) □

Assessment and incorporation of oil reserves:

- Chalabil Phase II, Federal Zone (USD $1,009 million)
- Oil and Gas in Shale Project, Federal Zone (USD $963 million)
- Área Perdido Phase II, Federal Zone (USD $1,001 million)
- Uchukil Phase II, Federal Zone (USD $1,172 million)
- Exploration Project Campeche Oriente, Federal Zone (USD $1,827 million)
- Exploration Project Comalcalco, Federal Zone (USD $2,066 million)
- Exploration Project Holok, Federal Zone (USD $1,143 million)
- Tsimin Xux Project, Federal Zone (USD $7,855 million) □ Integral Veracruz Project, Federal Zone (USD $4,497 million) □ Drilling of wells and construction of oil pipelines:
- Campo Xikin, Federal Zone (USD $1,434 million)
- Integral Arenque, Federal Zone (USD $2,845 million)
- Integral Bellota-Chinchorro, Federal Zone (USD $6,146 million) □ Integral Cactus Sitio-Grande, Federal Zone (USD $3,683 million) □ Development and extraction of reserves:
- CE Ek-Balam, Federal Zone (USD $4,047 million)
- Burgos, Federal Zone (USD $28,386 million)
- Tamaulipas Constituciones Project, Federal Zone (USD $3,137 million)
- Integral Lakach, Federal Zone (USD $2,133 million)
- Integral Poza Rica, Federal Zone (USD $4,663 million)
- Integral Chuc, Federal Zone (USD $18,130 million)
- Integral Yaxche, Federal Zone (USD $6,173 million)
- Light Crude Marine Project, Federal Zone (USD $7,595 million)
- Ixtal-Manik Project, Federal Zone (USD $2,259 million) □ Secondary recovery:
- Integral Complex Antonio J. Bermudez, Federal Zone (USD $13,245 million) □ Operation and maintenance:
- CE Santuario-El Golpe, Federal Zone (USD $980 million)
- Tertiary Oil Gulf Project, Federal Zone (USD $20,5767 million)
- Integral Jujo-Tecominoacán, Federal Zone (USD $5,963 million)
- Cantarell, Federal Zone (USD $70,865 million)
- Integral Ku-Maloob-Zaap, Federal Zone (USD $46,367 million)
- Ogarrio – Sánchez Magallanes Project, Federal Zone (USD $3,186 million)

B) DRILLING AND OTHER SERVICES (USD $250 MILLION–$800 MILLION)

With these projects, the government aims to expand Pemex from providing drilling and other services just to its own E&P division to being capable of competing in the market for service contracts with other companies.

- Well drilling and equipment repair/maintenance program, Federal Zone (USD $782 million)
- Project to acquire two jack-up platforms, Federal Zone (USD $497 million)
- Acquisition through financial leasing of two pieces of modular drilling equipment, Federal Zone (USD $239 million)

C) INDUSTRIAL TRANSFORMATION (USD $400 MILLION–$2,700 MILLION)

This set of projects aims to improve existing refineries' operations—their efficiency, reliability and production capacity—and includes the construction of a new refinery.

- Engineering, procurement and construction of the new refinery in Dos Bocas, Tabasco (USD $2,634 million)
- Maintenance of the production capacity of the Salamanca Refinery, Guanajuato (USD $963 million)
- Maintenance of the production capacity of the Madero Refinery, Tamaulipas (USD $1,033 million)
- Maintenance of the production capacity of the Salina Cruz Refinery, Oaxaca (USD $939 million)
- Maintenance of the production capacity of the Tula Refinery 2013-2017, Hidalgo (USD $1,036 million)
- Maintenance of the Minatitlán Refinery, Veracruz (USD $542 million)
- Maintenance of the Cadereyta Refinery, Monterrey (USD $446 million)

D) LOGISTICS (USD $100 MILLION–$250 MILLION)

With these projects, the government wants to take advantage of Pemex's infrastructure, knowledge and experience in an open market with good growth prospects.

- Maintenance case for the Mission System, Federal Zone (USD $188 million)
- Maintenance of transportation systems by pipe (Permit 5) South Zone, Gulf, Center and West, Federal Zone (USD $243 million)
- Implementation of the SCADA system in 47 transport systems by pipeline of Pemex Refining, Federal Zone (USD $147 million)
- Support for the monitoring and control of pipelines systems and flow measurement systems of the
- National Distribution Network of Pemex Refining, Federal Zone (USD $109 million)
- Support of safety, measurement, control and automation systems in TARs, Federal Zone (USD $209 million)

E) ETHYLENE (USD $25 MILLION–$80 MILLION)

With these projects, the government aims to make Pemex a profitable company with attractive margins, diversify the product portfolio and implement strategic alliances for secondary services.

- Sustainability of the production capacity of the 2016-2020 ethylene plant of the Morelos Petrochemical Complex, Veracruz (USD $76 million)
- Safety and environmental protection based on observations and regulations II in the Morelos
- Petrochemical Complex, Veracruz (USD $30 million)
- Maintenance of the production capacity of the 2015-2017 Mitsui plant of the Morelos Petrochemical Complex, Veracruz (USD $26 million)
- Maintenance program for the Water Treatment Plant, Veracruz (USD $27 million)

- Maintenance program for the Steam Generation Plant, Veracruz (USD $27 million)
- Maintenance program for the Electric Generation Plant, Veracruz (USD $27 million)

F) FERTILIZERS (THE SUBSIDIARY THAT OBTAINED THE LOWEST BUDGET OVERALL, WITH PROJECTS NO HIGHER THAN $25 MILLION)

The government aims to integrate ammonia into the value chain, reactivate the production of ammonia and urea and recover the capacity, efficiency and operational reliability of Fertinal.

- Maintenance of the ammonia plant V of the Cosoleacaque Petrochemical Complex, Veracruz (USD $25 million)
- Maintenance for the transport, storage and handling of ammonia, Federal Zone (USD $24 million)
- Maintenance of the refrigeration and storage plant of ammonia no. 2 of the Pajaritos Refrigerated
- Terminal, Veracruz (USD $25 million)

Appendix B

CFE: WHAT TO EXPECT IN 2019

Budget Allocation

A) GENERATION I

With these projects, the government aims to increase productivity, cost-effectiveness and safety and to minimize environmental impact, while remaining in compliance with the regulatory framework.

- Maintenance of the conventional turbogas, mobiles and combined cycle generating units of EPS Generation I (USD $75 million)
- Maintenance of the conventional vapor and internal combustion generating units of EPS Generation I (USD $68 million)

B) GENERATION II

This set of projects focuses on ensuring operational safety and maintaining, rehabilitating and modernizing infrastructure, allocating resources to ensure the reliability—and, therefore, the availability—of the equipment.

- Maintenance of the conventional turbogas, mobiles and combined cycle generators of EPS Generation II (USD $356 million)
- Maintenance of EPS Generation II carboelectric generation units (USD $345 million)
- Maintenance of the conventional vapor and internal combustion generation units of EPS Generation II (USD $53 million)

C) GENERATION III

These projects include the plan to modernize hydroelectric power plants as well the maintenance of generation units for this type of technology. Investments are planned for efficiency improvement projects, maintenance projects scheduled to the generation units. The units that have higher profitability will be prioritized, with a focus on recovering their operational efficiency and reducing the variable cost of operation in order to maintain CFE's competitiveness in the wholesale electricity market.

- Maintenance of the conventional turbogas, mobiles and combined cycle generation units of EPS Generation II (USD $61 million)
- Maintenance of the conventional vapor and internal combustion generation units of EPS Generation III (USD $45 million)

D) GENERATION IV

With these projects, the government aims to improve the operational, maintenance and administrative processes to achieve competitive operational costs. The investment in hydroelectric power plants will be used for a comprehensive rehabilitation of the large curtains auscultation system. Geotechnical safety will be evaluated, and spare parts and equipment will be acquired to modernize control systems.

- Maintenance of the conventional vapor and internal combustion generation units of EPS Generation IV (USD $36 million)
- Maintenance of the EPS Generation IV carboelectric generation units (USD $28 million)
- Maintenance of the conventional turbogas, mobiles and combined cycle generation units of EPS Generation IV (USD $20 million)
- Maintenance of Empalme II (USD $18 million)

E) GENERATION VI

With these projects, the government aims to achieve cost optimization by improving productivity and lowering operative costs.

- Maintenance of the conventional vapor and internal combustion generation units of EPS Generation VI (USD $84 million)
- Maintenance of the conventional vapor and internal combustion generation units of EPS Generation VI (USD $33 million)

- Maintenance of the EPS Generation VI geothermal electric units (USD $28 million)

F) TRANSMISSION

With these projects, the aim is to provide the public service of power transmission while, among other activities, financing and installing expanded infrastructure to provide the service more profitably, generating economic value.

- Modernization of power substations of the metropolitan transmission area 2014-2016 (USD $89 million)
- Implement an intelligent electricity network (USD $88 million)
- Installation of transformers and construction of transmission line in Guadalajara (USD $32 million)
- Replacement of power transformers of the metropolitan transmission area 2014-2016 (USD $28 million)

G) DISTRIBUTION

With these projects, the government wants to guarantee efficiency, continuity, quality and safety in the provision of public power service and to develop personnel so that they will be satisfied with and feel a loyalty to the company. The government also wants to achieve operational improvements to comply with regulatory requirements and meet international best practices.

- SLT 2021 Reduce Energy Loses in Distribution (USD $24 million)
- 1620 Mexico Valley Distribution (USD $23 million)
- 1921 Reduce Energy Loses in Distribution (USD $22 million)

H) INVESTMENT PROJECTS WITH DEFERRED IMPACT IN THE EXPENDITURE REGISTRY (PIDIREGAS)

Pidiregas are used to finance the electricity sector. These long-term investment projects are designed to compensate for the scarcity of public resources for investment.

- CC Repotenciación CT Manzanillo, U-1 and U-2 (USD $92 million)
- Pacífico (USD $46 million)
- La Yesca (USD $38 million)
- Agua Prieta II, with solar field (USD $33 million)
- El Cajón (USD $29 million)
- Cn Laguna Verde (USD $28 million)
- Empalme I (USD $24 million)
- Mexico Valley II (USD $23 million)
- 1116 Northwestern Transformation (USD $19 million)
- CCC Tula, packages 1 and 2 (USD $18 million)

Appendix C

SCT: WHAT TO EXPECT IN 2019

Budget Allocation

1. Projects executed by state-owned companies:

A) ADMINISTRACIÓN PORTUARIA INTEGRAL DE VERACRUZ, S.A. DE C.V.

Among its projects, this company will build a double railway track that will start in the Logistic Activities Zones and end at the connection point of the FERROSUR-KCSM tracks. This company will also begin constructing construction of the first stage of the expansion of the Port of Veracruz.

- Port Maintenance and Infrastructure Program 2019-2021 (USD $8.8 million)
- Railway bypass to Santa Fe (USD $7.8 billion)
- Natural expansion of the Port of Veracruz in the northern zone (USD $33.6 billion)
- New customs checkpoint for the Port of Veracruz (USD $13.2 billion)

B) FERROCARRIL DEL ISTMO DE TEHUANTEPEC, S.A. DE C.V.

This company aims to return the railway infrastructure to an optimal state by replacing sleeper cars, rails, and fastening materials that are currently in poor condition in order to increase the efficiency, safety and quality of service to passengers.

- Maintenance Investment Program for the Chiapas and Mayab railroads, 2015-2018. (USD $26.3 billion)

C) ADMINISTRACIÓN PORTUARIA INTEGRAL DE ALTAMIRA, S.A. DE C.V.

This company will construct six breakwaters 180 m from the coast, with a length of 500 m and a 375 m separation between structures.

- Coastal Protection Works, Stage1 (USD $8.8 billion)

D) ADMINISTRACIÓN PORTUARIA INTEGRAL DE ENSENADA, S.A. DE C.V.

This company will use prefabricated rock materials to build an extension to the breakwater of 400 m to reach a length of 2040 linear meters.

E) ADMINISTRACIÓN PORTUARIA INTEGRAL DE LÁZARO CÁRDENAS, S.A. DE C.V.

This company will work on delimiting the Port of Lázaro Cárdenas.

- Construction, installation and setup of photovoltaic systems for the generation of electrical energy (USD $371 million)
- Construction of adjacent fences in the port (USD $470 million)

F) ADMINISTRACIÓN PORTUARIA INTEGRAL DE MAZATLÁN, S.A. DE C.V.

In Mazatlán, this rehabilitation will repair the bodies and slopes of both breakwaters, with lengths of 440 m for El Crestón and 370 m for the Chivos, both built using rocks for a second layer and reinforcing the shell with pre-cast concrete.

- Repair El Crestón and Chivos breakwaters (USD $6.9 billion)

G) ADMINISTRACIÓN PORTUARIA INTEGRAL DE TOPOLOBAMPO, S.A. DE C.V.

The Project refers to the extension of the public pier of the port of Topolobampo, as well as the leveling and logistic training of 15.1 hectares.

- Expansion of the Graneles pier (position no.3) of the port of Topolobampo. (USD $7.2 billion)

2. Projects executed by decentralized public entities:

A) AEROPUERTOS Y SERVICIOS AUXILIARES

This project mainly consists of extending the runway of Chetumal Airport by 500 m and expanding the passenger building in compliance with international standards in order to receive larger aircrafts.

- Chetumal International Airport (USD $7.8 billion)

3. Projects executed through public-private partnerships:

A) MULTIANNUAL CONSERVATION OF THE FEDERAL HIGHWAY NETWORK (PIRÁMIDES-TULANCINGO-PACHUCA) FOR THE PERIOD 2017-2027. TOTAL INVESTMENT OF USD $110 MILLION.

This project will address two stretches of highway. The first two-and-a-half years will focus on the reconstruction and rehabilitation of sections of the road, its bridges and its structures. Periodic routine maintenance will be performed for the rest of the contract period.

B) MULTIANNUAL CONSERVATION OF THE FEDERAL HIGHWAY NETWORK (SALTILLO-MONTERREY-LA GLORIA) FOR THE PERIOD 2017-2027. TOTAL INVESTMENT OF USD $118 MILLION.

This project will also address two stretches of highway, with the first two-and-a-half years focusing on the reconstruction and rehabilitation of sections of the road, its bridges and its structures and with periodic routine maintenance being performed for the rest of the contract period.

C) MULTIANNUAL CONSERVATION OF THE FEDERAL HIGHWAY NETWORK (APP ARRIAGATAPACHULA). TOTAL INVESTMENT OF USD $208 MILLION DOLLARS.

The project, in its first two years and six months, will reconstruct and rehabilitate the pavement, bridges and structures, drains, adjacent dirt roads, signage, barriers and guardrails of a single section of the federal highway MEX-200. Periodic and routine maintenance and road services will be performed through the contract period (2018-2028).

D) MULTIANNUAL CONSERVATION OF THE FEDERAL HIGHWAY NETWORK (APP CAMPECHEMÉRIDA). TOTAL INVESTMENT OF USD $95 MILLION.

The project, in its first two years and six months, will reconstruct and rehabilitate the pavement, bridges and structures, drains, dirt roads, signage, barriers and guardrails of a two sections of the federal highway MEX-180. Periodic and routine maintenance and road services will be performed through the contract period (2018-2028).

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Endnotes

[1] Figures in USD at an exchange rate of MxN $19 per USD $1.

[2] Congressional Declaration of Purpose of the Federal Expenditure Budget for the Fiscal Year 2019 (*Presupuesto de Egresos de la Federación para el Ejercicio Fiscal 2019*), published on the website of the Ministry of Finance and Public Credit (*Secretaría de Hacienda y Crédito Público*) (www.transparenciapresupuestaria.gob.mx/es/PTP/infografia_ppef2019).

[3] Law of Income of the Federation for the Fiscal Year of 2019 (*Ley de Ingresos de la Federación para el Ejercicio Fiscal 2019*), published on December 28, 2018 on the Federal Offcial Gazette (Diario Oficial de la Federación).

[4] Federal Expenditure Budget for the Fiscal Year 2019 (*Presupuesto de Egresos de la Federación para el Ejercicio Fiscal 2019*), published on December 28, 2018 on the Federal Offcial Gazette (Diario Oficial de la Federación).

[5] "*Implicaciones del Paquete Económico 2019*" by the Centro de Investigación Económica y Presupuestaria, A.C.,

[6] "*2019 Fiscal Budget: The Government Approves its First Big Test*" by BBVA Research (www.bbvaresearch.com/wp-content/uploads/2018/12/181217_FiscalBudget2019.pdf).

[7] Lopez Obrador, Andrés Manuel, "7 Proyectos Prioritarios", July 23, 2018, retrieved from https://lopezobrador.org.mx/temas/7-proyectos-prioritarios/

[8] Plan Nacional de Refinación (http://www.pemex.com/nuestro-negocio/tri/plannacionalderefinacion/Paginas/default.aspx) and Plan Nacional para la Producción de Hidrocarburos (http://www.pemex.com/nuestro-negocio/pep/producciondehidrocarburos/Paginas/default.aspx).

[9] Notice published by the Federal Electricity Commission (*Comisión Federal de Electricidad*) on January 25, 2019 on it website.