MEXICO HYDROCARBONS REFORM
Oil, Gas & Mineral Law Section
Houston Bar Association
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I. INTRODUCTION
II. UPSTREAM
III. MIDSTREAM AND DOWNSTREAM
IV. CHALLENGES
I. Introduction
Critical Time for Mexico’s Energy Industry

Source: SENER

Investment in E&P (Billions of pesos, real)

Oil production (Million of barrels per day)
Critical Time for Mexico’s Energy Industry

Source: SENER

- Natural gas consumption: 7,615 million cubic feet per day (100%)
- Natural gas production: 4,067 million cubic feet per day (53%)
- Natural gas import: 3,548 million cubic feet per day (47%)

Million cubic feet per day

Mexico Energy Reforms

Critical Time for Mexico’s Energy Industry

Source: SENER

Gasoline consumption

Thousands of barrels per day

Year


Gasoline import

Gasoline production

556 (100%)
393 (71%)
164 (29%)

426 (53%)
370 (47%)

796 (100%)

Source: SENER
Critical Time for Mexico’s Energy Industry

Mexico is a net importer of petrochemical products.

Source: SENER
Critical Time for Mexico’s Energy Industry

Source: PEMEX
On December 21, 2013, the constitutional reform was passed, opening Mexico’s energy industry to the participation of the private sector.

Prior to the Reform, Mexico had one of the most restrictive legal frameworks for oil & gas exploration and production, midstream and downstream in the world.
On August 12, 2014, a package of legislation to implement the constitutional reform became effective in Mexico (including amendments to other existing laws):

- Hydrocarbons Law
- Hydrocarbon Revenues Law
- PEMEX Law
- Electric Industry Law
- Federal Electricity Commission Law
- Geothermal Energy Law
- Law of the Energy Regulatory Bodies
- Law creating the National Agency of Industrial Security and Environmental Protection of the Hydrocarbon Sector and
- Law of the Mexican Oil Fund for Stabilization and Development
### Scope

**E&P Contracts**

<table>
<thead>
<tr>
<th>Type of Contract</th>
<th>Compensation</th>
<th>Independent Regulator (CNH) grants E&amp;P contracts upon competitive tenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>Cash</td>
<td>PEMEX as a market competitor</td>
</tr>
<tr>
<td>Profit Sharing</td>
<td>% of profits</td>
<td></td>
</tr>
<tr>
<td>Production Sharing</td>
<td>% of production</td>
<td></td>
</tr>
<tr>
<td>Licenses</td>
<td>Production at the wellhead</td>
<td></td>
</tr>
</tbody>
</table>

**Permits will be granted for:**

- Refining
- Gas Processing
- Petrochemicals
- Transport, storage and distribution of hydrocarbons and petroleum products, LNG

**WHOLESALE ELECTRICITY MARKET**

- Generation
- Direct Sales to Unregulated Consumers
- Marketing
II. Upstream
• Directs national energy policy
• Defines E&P areas to be offered in bid process; as well as the type of contract to be offered for a given area
• Grants allocations, including under “round zero”
• Defines commercial terms of contracts
• Issues gas processing and oil refining permits

• Conducts the public tenders to award contracts and enters into the contracts on behalf of the State
• Regulates exploration and production operations
• Will maintain seismic and geological databases

• Determines the economic and fiscal terms for each E&P contract.

• Regulates and supervises health, safety and environment for E&P operations and facilities.
• Regulates disposal, abandonment, etc.
**PEMEX Round Zero**

**Areas Granted to PEMEX (8/13/14):**
- 100% of PEMEX’s producing areas
- 83% of Mexico’s 2P reserves
- 21% of Mexico’s prospective resources

**Round Zero Assignations to PEMEX**

- Fixed-fee Service contracts with third parties
- Assignments to state productive entities (SENER consent)
- Request Migration to Contracts (SENER consent)

**Areas Not Granted to PEMEX**

- Available for Future Bid Rounds (SENER/CNH)
- JVs

**CNH Tender Process to Select PEMEX’s Partner***

**PEMEX in consortium with 3rd parties***

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* A CNH tender process is not required for the migration of existing PEMEX integrated exploration and production contracts and financed public works contracts (contratos integrales de exploración y producción and contratos de obra pública financiada)
## PEMEX Round Zero Results

### Type/Area

<table>
<thead>
<tr>
<th>Type/Area</th>
<th>2P Reserves (MMboe)</th>
<th>Prospective Resources (MMboe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>20,589</td>
<td>18,222</td>
</tr>
<tr>
<td>Shallow waters</td>
<td>11,374</td>
<td>7,472</td>
</tr>
<tr>
<td>- Southeast</td>
<td>11,238</td>
<td>7,472</td>
</tr>
<tr>
<td>- North</td>
<td>136</td>
<td>-</td>
</tr>
<tr>
<td>Onshore</td>
<td>8,818</td>
<td>5,913</td>
</tr>
<tr>
<td>- South</td>
<td>4,379</td>
<td>5,371</td>
</tr>
<tr>
<td>- Chicontepec</td>
<td>3,556</td>
<td>-</td>
</tr>
<tr>
<td>- Burgos</td>
<td>425</td>
<td>-</td>
</tr>
<tr>
<td>- Rest of North</td>
<td>459</td>
<td>542</td>
</tr>
<tr>
<td>Deep waters</td>
<td>397</td>
<td>1,824</td>
</tr>
<tr>
<td>- Perdido</td>
<td>-</td>
<td>3,013</td>
</tr>
<tr>
<td>- Holok-Han</td>
<td>397</td>
<td>1,824</td>
</tr>
<tr>
<td>Unconventional</td>
<td>-</td>
<td>3,904</td>
</tr>
<tr>
<td>Total</td>
<td>20,589</td>
<td>22,126</td>
</tr>
</tbody>
</table>

### Source:
SENER
Bid Rounds
E&P Contracts

1. Selection of the areas

2. Technical guidelines of the bidding rounds.
   Technical design of contracts.

3. Fiscal terms of contracts.
   Determine economic factors for contract award:
   - % production or operating profits for the nation
   - the investment commitments by contractor or
   - a combination of both

4. Conducts the bidding rounds
   Decides on the winning bids.

5. Awards and signs the contracts on behalf of the Mexican State.

6. Technical management of contracts.

In addition to Mexican income Tax, new E&P tax for states and municipalities and other applicable taxes.
Production Sharing Contracts

• The contractor retains production with a value equal to the recoverable costs and its share of operating profits.

• The operating profits are generally calculated by subtracting the following amounts from the contract value of the hydrocarbons produced: (i) the royalty amount paid by the contractor and (ii) the E&P costs incurred by the contractor.

• Costs incurred under the contract will be considered eligible for recovery only if they are strictly indispensable and meet the requirements established by the contract and the rules issued by the Finance Ministry.
National Content

- Hydrocarbons Law requires that the hydrocarbon exploration and production activities conducted in Mexico have at least 35% national content on average.

- Deep water and ultra deepwater activities subject to different thresholds.

- Pemex (with respect to Round Zero areas) and contractors (that may include Pemex) must progressively achieve the minimum national content percentage established by their respective contract.
National Content

Methodology for calculating local content:

\[ PCN = \frac{CNB + CNMO + CNS + CNC + TT + I}{B + MO + S + C + TT + I} \times 100 \]

Percentage of local content

Source: SENER
National Content

- **Goods**
  - Accumulated value of transformation made in Mexico along the entire supply chain

- **Labor**
  - Payroll of National workers

- **Services**
  - National goods and labor used in services

- **Training**
  - Provided to national workers

- **Technology transfer**
  - Expenditures on the transfer of knowledge to improve the effectiveness and efficiency in the production of a good, the implementation of a process or the provision of a service

- **Infrastructure**
  - Expenses incurred in Mexico to improve the urban and rural environment.
  - Investment in national territory.

Source: SENER
Round One
Round 1 Map – All Areas

Source: SENER
Round 1.1-Shallow Waters Exploration (Production Sharing Contracts)

14 areas:

Source: CNH
Round 1.1-Shallow Waters Exploration (Production Sharing Contracts)


- Results:
  - 14 areas were offered
  - 7 bidders participated (3 individual companies and 4 consortiums)
  - 11 offers were submitted for 6 areas
  - 2 areas were awarded
Round 1.2-Shallow Waters Production (Production Sharing Contracts)

5 areas:

Source: CNH
Round 1.2 - Shallow Waters Production (Production Sharing Contracts)

• February 27, 2015 – September 30, 2015

• Results:
  – 5 areas were offered
  – 9 bidders participated (5 individual companies and 4 consortiums)
  – 15 offers were submitted for 3 areas
  – 3 areas were awarded

Source: CNH
Round 1.3 - Onshore (License Contracts)

25 areas:

Source: CNH
Round 1.3 - Onshore (License Contracts)

• May 12, 2015 – December 15, 2015

• Results:
  – 25 areas were offered
  – 40 bidders participated (26 individual companies and 14 consortiums)
  – 168 offers were submitted
  – 25 areas were awarded

Source: CNH
Round 1.4-Deepwater (License Contracts)

10 areas:
Round 1.4-Deepwater (License Contracts)

- 10 areas are being offered in the Gulf of Mexico
  - 6 in the Salina Basin
  - 4 in Perdido Fold

- Offer submission and opening date: December 5, 2016

Source: CNH
• **Round 2.1 (Shallow Water - Production Sharing Contracts):**
  – 15 areas are being offered in the Gulf of Mexico
  – Exploratory areas with discoveries and reserves
  – Prospective resources: 1587 barrels of oil equivalent

• **Round 2.2 (Onshore – License Contracts):**
  – 12 areas are being offered in the Gulf of Mexico
  – Exploratory / Exploratory + Production Areas
  – Prospective resources: 643.2 million barrels of oil equivalent

Source: CNH
Pemex Farmouts - Trion Block

Source: CNH
Mexico Energy Reforms

• Surface of 1,285 square kilometers (798.46 square miles) and located in the deep water of the Gulf of Mexico, within the Perdido Fold.

• Pemex shall have the following participation:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pemex</td>
<td>40%</td>
</tr>
<tr>
<td>Operator</td>
<td>Minimum of 30%</td>
</tr>
<tr>
<td>Company 2</td>
<td>Minimum of 10%</td>
</tr>
<tr>
<td>Company 3</td>
<td>Maximum of 10%</td>
</tr>
</tbody>
</table>

• The winning bidder shall, in accordance with the JOA, pay 100% of the joint interest costs for at least US$ 570,000,000.

Source: CNH
III. Midstream and Downstream
## Permits

<table>
<thead>
<tr>
<th>Requires permit from SENER:</th>
<th>Requires permit from CRE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment and refining of crude oil</td>
<td>Transportation, storage and distribution of crude oil, natural gas, petroleum products and petrochemicals</td>
</tr>
<tr>
<td>Processing of natural gas</td>
<td>Compression, liquefaction, decompression and regasification of LNG, petroleum products and petrochemicals</td>
</tr>
<tr>
<td>Import and export of crude oil, natural gas, LNG and petroleum</td>
<td>Retail sale of natural gas, refined products and petrochemicals</td>
</tr>
<tr>
<td>products and petrochemicals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated pipeline transportation and storage systems</td>
</tr>
</tbody>
</table>
National Center of Natural Gas Control (CENAGAS)

• CENAGAS acquired from PEMEX, and owns and operates, all of PEMEX’s gas transmission and storage facilities.

• CENAGAS is the independent manager of the “National System for the Integrated Transportation and Storage of Natural Gas.”
  – Comprised of natural gas transmission and storage infrastructure owned by CENAGAS or private parties.
  – CENAGAS will carry out tender processes for the expansion of the system.

• Independent interconnected transmission and storage systems with separate and independent administrators.
Open Access and Competition

- Companies providing gas transportation, distribution or storage service shall provide open and non-discriminatory access to their facilities.

- Rules to establish separation of the activities related to natural gas transportation and marketing.
Retail Sales

• Since January, 2016, permits are issued for the retail sale of gasoline and diesel fuel to private parties.
• Since April, 2016, permits are issued for imports of gasoline and diesel fuel to private parties.
IV. Challenges
Challenges

• Overregulation and bottlenecks
• Corruption and security
• Political opposition
• Infrastructure (roads, facilities, public services, etc)
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