Opportunities in the Energy Reform

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November, 2017
Opportunities in the energy reform

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1. The Mexican energy reform

• Sales of US$200 billion/year
• Employs 300,000 workers
• Represents 13% of Mexican exports
• Until 2014, the Mexican energy sector was managed through two state monopolies:
  – CFE (national electricity board)
  – PEMEX (oil company)
• Private companies were allowed to operate in some sectors, such as the petrochemical industry or power generation, or as suppliers, distributors or subcontractors of the state companies.
1. The Mexican energy reform

1. Hydrocarbon exploration and production: Reserved

2. Hydrocarbon transport, storage and distribution: Reserved, except natural gas

3. Industrial hydrocarbon transformation: Reserved

4. Hydrocarbon commercialization: Reserved, except retail, gasoline, natural gas, LPG.

5. Electricity generation and import: Reserved, except self-consumption

6. Electricity transmission, distribution and supply: Reserved

7. Petrochemical industry: Open
1. The Mexican energy reform

• The Energy Reform has created an energy sector operating in free market conditions where PEMEX, CFE and private companies compete on equal terms.

• The State, through the Energy Ministry, regulates, governs and leads the national energy sector, and the Nation retains ownership of the resources in the subsoil.

• The new energy sector is guided by three regulators:
  – National Hydrocarbons Commission (CNH)
  – Energy Regulatory Commission (CRE)
  – Agency for Safety, Energy and Environment (ASEA)
1. The Mexican energy reform

1. Hydrocarbon exploration and production: Open

2. Hydrocarbon transport, storage and distribution: Open

3. Industrial hydrocarbon transformation: Open

4. Hydrocarbon commercialization: Open

5. Electricity generation and import: Open

6. Electricity transmission, distribution and supply: Open, except National Electricity Grid (SEN)

7. Petrochemical industry: Open
2. Business opportunities

The modernization of the Mexican Energy Sector requires a minimum investment of approximately 900,000 million pesos (~$70,000 Millions USD) per year.

<table>
<thead>
<tr>
<th>Required investment in the Mexican Energy Sector over the next 10 years</th>
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<tbody>
<tr>
<td>Conventional oil and gas</td>
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<tr>
<td>Shale gas / oil</td>
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<tr>
<td>Deepwater</td>
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<tr>
<td>Refining</td>
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<td>Natural gas national pipeline network</td>
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<td>Petroleum products national network</td>
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<td>Service stations</td>
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<tr>
<td>Petrochemical plants</td>
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<tr>
<td>Power generation</td>
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<tr>
<td>Electricity transmission and distribution</td>
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<td><strong>TOTAL</strong></td>
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2. Business opportunities
Continuity of U.S. Shale Plays into Mexico

Source: Own creation with information from EIA.
3. The new hydrocarbon sector

**BIDDING PROCESS**

- SENER selects the block areas for bidding in the Round
- CNH announces the Round
- Access to data room
- Registration fee and appointment requests
- Pre-qualification
- Public announcement of pre-qualified parties
- Submittal and opening of bids
- Exploration and Production contract signing
  - License
  - Production sharing
  - Profit sharing

**FIVE-YEAR PLAN**
3. The new hydrocarbon sector

Five Year Plan

Source: Own creation with information from CNH
4. Energy reform achievements

• 72 contract areas awarded (33,449 Km²).

• Participation of 67 companies from 18 countries, 33 of them Mexican.

• Total expected investment has reached $60.86 Billion USD.

• Thanks to the energy reform, 3 farmouts have been offered and 2 assigned.

• The energy reform has resulted in the discovery of the Zama and Amoca fields, with an original volume of 2.4 to 3.0 Billion of BOE in place.

• Pemex made a recent discovery of a volume in place of 1.5 Billion of BOE in the Ixachi on-shore field.
5. Energy reform challenges

CNH has to improve the processes for upcoming biddings:

• Simplify procedures (contracts, pre-qualification, etc.)

• Improve communication and information

• Listen more to industry companies

• Improve coordination between regulators

• Avoid over-regulation

• Improve processes for superficial occupation (social impact)

• Move faster in unconventional resources

• Find new prospects (Chihuahua, Yucatan Platform)
6. The energy reform and NAFTA

THE EMERGING INDUSTRIAL POWER HOUSE

• Electricity could become the dominant medium for delivering energy to end users.

• The era of cars driven by the internal combustion engine is coming to an end. Gasoline power is being replaced by electricity and cars are being redesigned.

• Natural gas use is increasing rapidly (40% in the last ten years in Mexico).

• Renewable energy is becoming more important.
6. The energy reform and NAFTA

THE EMERGING ENERGY PARADIGM

• Nations with natural gas reserves

• Nations with an automotive industry

• Nations with a solid research base

• Nations with entrepreneurial capabilities
THE ENERGY-DRIVEN INTEGRATION OF MEXICO, THE USA AND CANADA

- The North American bloc has extensive gas reserves. It produces 27% of the world’s gas and boasts gas reserves comparable to those of the Middle East.

- North America has one of the world’s largest automotive industries.

- Huge amounts of funding are going into developing new-generation cars and better use of renewable sources.

- The region has an enormous potential if we work together.
6. The energy reform and NAFTA

THE ENERGY SECTOR IN THE CONTEXT OF THE RENEGOTIATION OF NAFTA

• The Mexican energy reform generates great opportunities for investment and partnerships that will strengthen the integration and energy security of North America.

• Investments and access to markets must be preserved and strengthened, benefiting the production and transmission of energy that will enhance North American energy security.

• The integration of the energy sector is of great interest to the three countries.

• On August 2nd, the American Petroleum Institute (API), the Mexican Association of Hydrocarbon Companies (AMEXHI) and the Canadian Association of Petroleum Producers (CAPP) jointly supported the renegotiation of NAFTA, in order to avoid barriers to trade, and promote policies aimed at opening up markets to create opportunities for trade growth and job creation.
6. The energy reform and NAFTA

- Mexico’s energy reform have accomplished the goal of increasing investment to a total of 60.86 Billion USD only in the first two rounds and farmouts.
- Mexico’s energy reform has very solid legal bases, making it hard to revert, even in the face of disadvantageous political scenarios.
- It is important to accomplish a favorable renegotiation of NAFTA, creating a win-win situation for the three countries.