Today, Mexico’s fundamentals are stronger, allowing to face external shocks in a better position.

Source: The World Bank
O&G: The Industry Moving the World

• According to the IEA, by 2040, crude oil demand is expected to grow 6% up to 103 MMbd, while natural gas consumption increases by 50%.

World energy consumption 2014
100% = 9.4 Btoe

- 55% O&G
- 21% Coal
- 12% Biofuels and waste
- 12% Other

21% Industry
40% Transport
39% Other use
1% Non-energy use

PEMEX: The Most Important Company in Mexico

- **8th Crude oil producer**
- **Main producer** of oil, gas and refined products in Mexico
- **14th** Refining company worldwide
- Holder of **95%** of the country's 1P reserves
- **Key player** in hydrocarbons logistics infrastructure
- More than **40,000 km** of pipelines
- **15th Logistics company** in the world by assets
- **Largest Tax Contributor**
- **MXN 1.6 billion** annual revenues

**8th Drilling company**

- **5th** Producer of petrochemicals in Mexico
- **1st Producer of phosphates** in LATAM
- **9** Gas Processing Complexes
- **74** Storage and distribution terminals
  - Close to **1,500** tank trucks
- **16** Ships with transportation capacity of **4,618 Mb**
- **258** Operating platforms
- **9,000** Wells
- **98th largest company**
- **7th Trading company in the world**

---

1. Last five years average.
2. Source: Fortune 500 ranking.
Distribution of PEMEX’s Reserves

PEMEX holds 95% of Mexico’s hydrocarbon reserves

<table>
<thead>
<tr>
<th>Basin</th>
<th>Reserves</th>
<th>Prospective Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1P (90%)</td>
<td>2P (50%)</td>
</tr>
<tr>
<td>Southeastern</td>
<td>7.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Tampico Misantla</td>
<td>1.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Burgos</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Veracruz</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Sabinas</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Deepwater</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total PEMEX</strong></td>
<td><strong>8.6</strong></td>
<td><strong>15.1</strong></td>
</tr>
</tbody>
</table>

MMMboe (billion barrels of oil equivalent)

PEMEX holds 95% of Mexico’s hydrocarbon reserves.

1. As of January 1, 2017. Numbers may not total due to rounding.
2. Prospective resources assigned to PEMEX in Round Zero.
3. As of January 1, 2017. 1P includes discoveries, developments, revisions and delineations. 3P replacement rate only considers new discoveries. Reflects reserve replacements conducted by PEMEX.
Environmentally Conscious and Socially Responsible Company

• We strive to minimize the impact of our operations to the environment and to maximize the benefits that a sustainable operation brings.
Key Highlights / First Half-Year Recap

Joint venture with Air Liquide for the supply of hydrogen to our Tula refinery

Consortium formed by PEMEX, Chevron and Inpex was awarded Block 3 North in deep waters of the Gulf of Mexico

Trion block through a farm-out with BHP Billiton

Migration process without a partner of the fields Ek and Balam in shallow waters

PEMEX was awarded two blocks in shallow waters through consortia with DEA and Ecopetrol

The first open season was awarded to Tesoro
Key Highlights 2Q17

Positive net result of 121 billion pesos as of first half 2017

Third consecutive quarter with positive net results

Crude oil production remains stable: it averaged 2,013 Mbd

Gas flaring recorded its best performance in 3 years: 4.1%

Crude oil processing remains in line with 1Q17
Upstream: Current Status and Challenges

- PEMEX continues to be a main player in the O&G industry
- The challenge has been replacing Cantarell, a giant field that produced by itself 2 MMbd, to stabilize and eventually increase production

1 Includes non-capitalized maintenance.
Source: PEMEX 2017
Industry Cost Leader

- The development of exploitation strategies focused on shallow waters has allowed PEMEX to maintain very competitive production costs, as compared to most of its peers in the oil and gas industry.
- Lower production costs provide greater flexibility, especially under lower crude oil price scenarios.

**Production Costs**

(USD / boe)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost before taxes</td>
<td>5.2</td>
<td>6.1</td>
<td>6.8</td>
<td>7.9</td>
<td>8.2</td>
<td>6.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Taxes and Duties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.4</td>
<td>2.7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

**2016 Benchmarking: Production Costs**

(USD / boe)

- Petrobras: 16.27
- Chevron-Texaco: 13.15
- Eni S.P.A.: 12.55
- Connoco Phillips: 12.00
- Royal Dutch / Shell: 10.92
- Exxon Mobil: 9.89
- BP: 8.46
- PEMEX: 7.78
- Total S.A.: 6.14
- Statoil: 5.00

**Notes:**

- a) Figures in nominal values.
Upstream: New Production Frontiers

• Underinvestment and reduced access to know-how has limited intensive exploitation of new complex frontiers to stabilize and increase production

Deepwater Infrastructure¹

Shale Potential²

¹ Source: National Geographic
² Source: CNH with information from North Dakota Department of Mineral Resources, Oklahoma Geological Survey, Texas Railroad Commission, Bureau of Ocean Energy Management, Oil & Gas Journal
Upstream: Business Plan

- With profitability as its ultimate goal, the Business Plan contemplates increased production and investment through different business schemes such as JVs and farm-outs to maintain and gradually increase the production platform.

**Business Plan Scenario**
- Concentrates on assignments that are profitable after taxes

**Improved Scenario**
- Aggressive farm-out program
- Development of fields that are profitable for the country and which, under similar fiscal conditions than privates, are profitable for PEMEX after taxes
- Incremental income from farm-out production is shared between PEMEX and the Federal Government

**Crude Oil Production***

*Includes PEMEX’s production estimations sent to the Ministry of Finance on September 2017 and others as considered in the Business Plan published in November 2016.
Upstream: Recent Developments (Trion & Block 3)

- BHP Billiton will invest up to USD 1.9 billion before PEMEX makes additional contributions
- Joint operating agreement was signed on March 3, 2017
- PEMEX expects to invest USD 600 million by the time initial production is achieved

- Joint Venture with Chevron and Inpex
- The contract considers 3,374 work units, equivalent to USD 3.4 million
- No wells were committed for this contract
- Contract was signed on February 28, 2017
Upstream: Upcoming Developments

- PEMEX will focus on the development of projects through joint ventures and migrations to share risks, obtain technology, know-how and improvements within the upstream division.

Farm-outs (Round 2)
- Ogarrio, Cárdenas-Mora & Ayín-Batsil

Board of Directors approves second deep-water farm-out
- Maximino-Nobilis

Migrations without a partner
- Ek-Balam
  May 2, 2017
- Future case-by-case analysis

CSIEE¹
- Advanced model contract
- San Ramón and Blasillo to be signed during the 2H17

¹ Exploration and Extraction Integrated Service Contracts.
Content

1. A Snapshot of Mexico & PEMEX
2. Upstream
3. Midstream & Downstream
4. Overall Financial Performance
5. Business Outlook
Midstream: Investment Opportunities

- Further gasoline storage capacity and pipelines are required in Mexico. The U.S. has 27 times more infrastructure to supply fuel and 45 times more storage terminals than Mexico.

<table>
<thead>
<tr>
<th>Country</th>
<th>Gasoline Storage Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>99</td>
</tr>
<tr>
<td>USA</td>
<td>90</td>
</tr>
<tr>
<td>China</td>
<td>90</td>
</tr>
<tr>
<td>Japan</td>
<td>70</td>
</tr>
<tr>
<td>South Africa</td>
<td>60</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
</tr>
<tr>
<td>Iran</td>
<td></td>
</tr>
</tbody>
</table>

Gasoline Storage Days by Country\(^1\)

2016

Pipelines in the United States\(^2\) and in Mexico\(^3\)

---

1 Source: Strategy, PwC 2017
2 Source: http://pipeline101.com/where-are-pipelines-located
3 Source: EIA 2017
Downstream: Current Status and Challenges

• The challenge is to reverse the economic and operational losses of close to MXN 100 billion

**Achievements**
- Hydrogen supply JV with Air Liquide

**Future Projects**
- Hydrogen supply JVs for Madero and Cadereyta refineries
Midstream & Downstream: Business Plan

- Underinvestment, supply mandates and cost recognition are being and will continue to be addressed in the upcoming years to reverse the accumulated losses in the midstream and downstream divisions

**PEMEX Industrial Transformation**
- Partnerships in operation of auxiliary activities and revamps of refineries
- Operational discipline and reliability
- Timely attention to risk factors
- Cost efficiency and gradual acknowledgment of opportunity costs in transportation prices
- Pipeline custody
- Illicit markets

**PEMEX Logistics**
- Open season
- Concentrates on profitable business lines

---

### Impact of the Strategic Initiatives on the Financial Balance\(^1\) until 2025

(MXN billion in cash flow)

- **Financial Balance 2025** (Equivalent to -96.3 in 2017)
  - **Partnerships**: -108.9
  - **Safe and reliable operations**: 41.9
  - **Acknowledgment and efficiency in transportation costs**: 36.2

**Stolen Product**: -11

**Result**: 29.4

---

\(^1\) The financial balance considers the result from subtracting total expenses (including financing costs) from total revenues.
Midstream & Downstream: Upcoming Developments

- The Mexican fuels market is moving towards an open, competitive and market-driven price structure.
- Pemex Logistics is offering its non-used storage and distribution capacity to third-parties, which will yield additional revenues.

1. PEMEX auctioned 20% of its capacity in Baja California and Sonora, at fees 10% above the minimum required.
Positive Trend

- During 2016 operating losses were turned into income, net result was improved by 58% and the liquidity position was substantially improved. Debt’s maturity profile was extended to 7.3 years.
Since 2016, financial deficit has decreased. In addition, net indebtedness for 2017 is **substantially lower** than previous years, confirming the trend stated in our Business Plan.

2017 **Debt ceiling:** 150 bn **pesos** (≈8 bn dollars)

**Financing needs** for the year: 94 bn **pesos** (≈5 bn dollars)

- Any additional transaction throughout the year would be aimed to term-out PEMEX’s maturity profile or substitute bank financing.

Note: All numbers in billion pesos; exchange rate: 18.6 pesos per dollar
Debt ceiling for 2018 pending approval
Diversified Debt Structure

- PEMEX’s portfolio strategy has prioritized the development of new sources of financing to diversify its investor base and currencies.

- To reduce external impacts, the company has chosen a hedging strategy that matches its U.S. dollar-based income structure.

Note: As of June 30, 2017. Sums may not total due to rounding.
Credit Rating Agencies recognize PEMEX’s strategic importance for Mexico

2017 PEMEX annual rating revisions highlight:

- Stable finances
- Expectation of improved profitability due to the Energy Reform
- Close linkage to Mexican Government & fiscal relevance
- Key energy supplier

<table>
<thead>
<tr>
<th>Rating Agency</th>
<th>Last Revision</th>
<th>Global Scale</th>
<th>Outlook</th>
<th>National Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitch</td>
<td>August 2017</td>
<td>BBB+</td>
<td>Stable</td>
<td>AAA(mex)</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>August 2017</td>
<td>BBB+</td>
<td>Stable</td>
<td>mxAAT</td>
</tr>
<tr>
<td>Moody’s</td>
<td>April 2017</td>
<td>Baa3</td>
<td>Negative</td>
<td>Aa3.mx</td>
</tr>
<tr>
<td>R&amp;I</td>
<td>April 2017</td>
<td>BBB+</td>
<td>Stable</td>
<td>N.A.</td>
</tr>
<tr>
<td>HR Ratings</td>
<td>September 2017</td>
<td>HR A- (G)</td>
<td>Stable</td>
<td>HR AAA</td>
</tr>
</tbody>
</table>

Markets respond positively to PEMEX’s strategy

PEMEX’s efforts and business strategy have yielded tangible results, as shown in the spread between PEMEX’s 10Y benchmark and both Mexico’s UMS 10Y and US Treasury.

Source: Bloomberg
Investment Considerations

- The joint efforts have finally begun to bear fruit and to reflect in the results of the year. PEMEX has now stable finances, with positive trends, however, there is still room for improvement.

- As a result of the implementation of a Business Plan focused on profitability, the administration has very clear what will be the next steps taken to achieve financial equilibrium. PEMEX reiterates its commitment to prioritize profitability and sustainability.
A Snapshot of Mexico & PEMEX

Upstream

Midstream & Downstream

Overall Financial Performance

Business Outlook
2017 marks an inflection point:

- **Primary Surplus** (first time since 2012): 8.4 billion pesos
- Attainable Production Platform: 1.944 million barrels per day
- Conservative Price Projection: 42 dollars per barrel

In 2016 PEMEX exceeded its financial cash flow and production goal.