Investor Presentation

November 2017
Content

1. A Snapshot of PEMEX
   - Upstream
   - Midstream & Downstream
   - Overall Financial Performance
   - Business Outlook
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%.

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 revenues¹

- **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 company²
- **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)

1 As of January 1, 2017. Numbers may not total due to rounding.
2 Prospective resources assigned to PEMEX in Round Zero
Note: 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.
2017 Achievements

- Trion block through a farm-out with BHP Billiton
- Consortium formed by PEMEX, Chevron and Inpex was awarded Block 3 North in deep waters
- PEMEX was awarded two blocks in shallow waters through consortia with DEA and Ecopetrol
- Cárdenas-Mora & Ogarrio are PEMEX’s first two onshore farm-outs with Cheiron and DEA
- Migration process without a partner of the fields Ek and Balam in shallow waters
- Improvement in fiscal regime for fields that are non-profitable after taxes
- Joint venture with Air Liquide for the supply of hydrogen to our Tula refinery
- The first Open Season was awarded to Tesoro
Key Highlights as of September 2017

- Average production platform in line with the annual target of 1,944 Mbd
- Uninterrupted fuel supply throughout the country despite hurricanes and earthquakes
- Accumulated net result increased by 107.2%
- Accumulated operating income totaled 174 billion pesos (Jan – Sep 2017)
- Administrative, distribution, transportation and sales expenditures remained stable
- Implementation of crude oil hedging program to protect PEMEX’s budget against falls in oil prices
- Divestiture of stake in Los Ramones II Norte gas pipeline
Content

A Snapshot of PEMEX

2 Upstream

Midstream & Downstream

Overall Financial Performance

Business Outlook
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

Crude Oil Production

- Includes non-capitalized maintenance.

Source: PEMEX 2017

1 Includes non-capitalized maintenance.
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>
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</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>2.7</td>
<td>2.3</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**2016 Benchmarking: Production Costs**
(USD / boe)

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

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**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 Infrastructure\(^1\)

Shale Potential\(^2\)

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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 Production¹

Mbd

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.601</td>
<td>2.577</td>
<td>2.533</td>
<td>2.548</td>
<td>2.522</td>
<td>2.429</td>
<td>2.267</td>
<td>2.154</td>
<td>1.944</td>
<td>1.951</td>
<td>1.982</td>
<td>2.017</td>
<td>2.141</td>
</tr>
</tbody>
</table>

¹ 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: Farm-outs at a glance

![Map of Mexico showing farm-outs locations](image)

<table>
<thead>
<tr>
<th>Farm-Out</th>
<th>Trion</th>
<th>Cárdenas-Mora</th>
<th>Ogarrio</th>
<th>Nobilis-Maximino</th>
<th>Ayín-Batsil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winner</strong></td>
<td>BHP Billiton (Australia)</td>
<td>Cheiron Holdings Limited (Egypt)</td>
<td>DEA Deutsche Erdoel AG (Germany)</td>
<td>Winner will be announced in CNH’s Round 2.4 on January 31st, 2018</td>
<td>Will be part of a new bidding process</td>
</tr>
<tr>
<td><strong>Initial payment</strong></td>
<td>570</td>
<td>125</td>
<td>190</td>
<td>To be defined</td>
<td>To be defined</td>
</tr>
<tr>
<td><strong>Additional royalty value</strong></td>
<td>4%</td>
<td>13%</td>
<td>13%</td>
<td>To be defined</td>
<td>To be defined</td>
</tr>
<tr>
<td><strong>Cash tie-break payment (MMUSD)</strong></td>
<td>624</td>
<td>41.5</td>
<td>213.9</td>
<td>To be defined</td>
<td>To be defined</td>
</tr>
<tr>
<td><strong>3P Reserves (Million barrels of oil equivalent)</strong></td>
<td>485</td>
<td>93</td>
<td>54</td>
<td>502</td>
<td>359</td>
</tr>
<tr>
<td><strong>Type of Hydrocarbon</strong></td>
<td>Light crude oil</td>
<td>Light crude oil</td>
<td>Light crude oil</td>
<td>Light crude oil</td>
<td>Heavy oil</td>
</tr>
<tr>
<td><strong>Type of Field</strong></td>
<td>Deep waters</td>
<td>Onshore</td>
<td>Onshore</td>
<td>Deep waters</td>
<td>Shallow waters</td>
</tr>
<tr>
<td><strong>Type of Contract</strong></td>
<td>License</td>
<td>License &amp; Payment-In-Kind</td>
<td>License &amp; Payment-In-Kind</td>
<td>Production-sharing</td>
<td>To be defined</td>
</tr>
</tbody>
</table>
Upstream: Recent Developments (Trion & Block 3)

**Trion**

- 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

**Perdido Fold Belt – Block 3**

- 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
Cárdenas-Mora

- Cheiron Holdings offered a cash tie-break of USD 41.5 million
- Daily average production 13.7 thousand of barrels of oil equivalent per day (Mboed)
- PEMEX’s previous investments recognized (USD 166.5 million)
- Reserves 3P 93.19 million of barrels of oil equivalent (MMboe)
- Total expected investment USD 127.3 million

Ogarrio

- DEA Deutsche Erdoel AG cash tie-break offer of USD 213.9 million. Of this amount, PEMEX will receive USD 183 million
- Daily average production 15.6 Mboed
- PEMEX’s previous investments: USD 373 million
- Reserves 3P 53.97 MMboe
- Total expected investment USD 95.2 million
**Nobilis-Maximino**

- 3P Reserves: 502 Million barrels of oil equivalent
- Oil type: Light oil
- Deep waters: 3,000 meters
- Contract type: License
- Winner will be announced in CNH’s Round 2.4 on January 31st, 2018

**Ayín-Batsil**

- 3P Reserves: 359 Million barrels of oil equivalent
- Oil type: Heavy oil
- Shallow waters: 80 to 170 meters
- Contract type: Production Sharing
- Will be part of a new bidding process in the first half of 2018
PEMEX discovered the biggest onshore reservoir in 15 years: Ixachi-1

• Result of great exploration efforts and investments during the last 30 years
• Original volume of 1,500 million barrels of oil equivalent (MMboe)
• 3P Reserves of approximately 350 MMboe
• Wet gas & condensates reservoir located at 6,000-7,000 meters below sea level
• Closeness to existing infrastructure could benefit the project’s cost structure
• Expected initial production in 2020
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A Snapshot of PEMEX

Upstream

3 Midstream & Downstream

Overall Financial Performance

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>Gasoline Storage Days by Country¹</th>
<th>2016</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>

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

Pipelines in the United States² and in Mexico³ (2016)
Downstream: Current Status and Challenges

Infrastructure

<table>
<thead>
<tr>
<th>Capacity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Refineries in Mexico and one in U.S.A.</td>
<td>1,942 Mbd²</td>
</tr>
<tr>
<td>9 Gas Processing Centers</td>
<td>5,912 MMcfd³</td>
</tr>
<tr>
<td>2 Petrochemical Complexes</td>
<td>1,694 Tpa⁴</td>
</tr>
</tbody>
</table>

Main causes for non programmed shut-downs 2016⁶

- Hydrogen Supply: 63%
- Service supply (steam, water, electricity): 11%
- Equipment and Processes: 20%
- Repairment delays: 3%
- CFE: 3%

Non-Scheduled Shutdowns Index

- International reference (goal)
- 2013: 10.1%
- 2014: 11.2%
- 2015: 12.7%
- 2016: 26.3%
- 2017: 31.9%

1 From Pemex Industrial Transformation
2 Capacity in Mexico is 1,602 thousand barrels per day (Mb/d), Deer Park capacity is 340 Mb/d.
3 Million cubic feet per day.
4 Tonnes per annum
5 Average January – July
6 Figures from January to August 2016
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)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Contribution (MXN billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Balance 2025 (Equivalent to -96.3 in 2017)</td>
<td>-108.9</td>
</tr>
<tr>
<td>Partnerships</td>
<td>41.9</td>
</tr>
<tr>
<td>Safe and reliable operations</td>
<td>49.2</td>
</tr>
<tr>
<td>Acknowledgment and efficiency in transportation costs</td>
<td>36.2</td>
</tr>
<tr>
<td>Stolen Product</td>
<td>11</td>
</tr>
<tr>
<td>Result</td>
<td>29.4</td>
</tr>
</tbody>
</table>

\(^1\) 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; stages 1, 2 and 3 have been completed, and it will be fully liberalized by November 30th

Open Season: Pemex Logistics is offering its non-used storage and distribution capacity to third-parties, which will yield additional revenues

Stage 1: March 30, 2017
- Baja California
- Sonora

Stage 2: June 15, 2017
- Chihuahua
- Coahuila
- Nuevo León
- Tamaulipas
- Gómez Palacio, Durango

Stage 3: October 30, 2017
- Baja California Sur
- Durango
- Sinaloa

Stage 4: November 30, 2017
- Center and Eastern Mexican States

1 At fees 10% above the minimum required
2 Announced by Comisión Reguladora de Energía on November 16, 2017
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2. Upstream
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4. Overall Financial Performance
5. Business Outlook
Financial Performance

- Until the third quarter of 2017, average operating income is USD 3,163 million
- Debt’s maturity profile was extended to 7.5 years.
PEMEX Recorded a Positive Net Result from January to September 2017

- Nine consecutive months of positive net result since 2012, when the price of the Mexican Crude Oil Mix was 2.3 times higher

Net Result and Mexican Crude Oil Mix Price

Average: 63.5 USD/b

1. January – September average per year.
2. Financial information is reported under IFRS; Audited Quarterly Results, except 1Q17, 2Q17 and 3Q17, that are preliminary.
Net Indebtedness Trend

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.

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1 Debt ceiling for 2018 pending approval

Note: All numbers in billion pesos; exchange rate: 18.6 pesos per dollar
PEMEX – 2017 Financing Activities

In July, PEMEX carried out a bond transaction with the following characteristics:

- The reopening of two reference bonds due 10 and 30 years, and yield to maturity of 5.75% and 6.90%, respectively. This transaction was approximately three times oversubscribed.
- Repurchase of bonds totaling 1,739 million dollars due 2018 and 2019, to improve our amortization profile and increase the average debt maturity.

### Liability Management – Repurchase Transaction

USD million, July 2017

- **Debt maturity**: 2,840, 4,694, 8,210
- **Decrease in debt maturity**: 1,567
- **Revolving credit facilities**: 173

2017 2018 2019
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 September 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>mxAAA</td>
</tr>
<tr>
<td>Moody’s</td>
<td>April 2017</td>
<td>Baa3</td>
<td>Negative</td>
<td>Aa3.mx</td>
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<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
Final Remarks

PEMEX has **tackled short-term challenges** with determination and today has **stable finances**
- Budget adjustment
- Strengthening of financial balance
- Renewed access to financial markets and active debt management
- Primary surplus in 2017
- Covered financial needs until 2018
- Hedged on crude oil prices to ensure budget stability

PEMEX has **harnessed the Energy Reform’s historic opportunity** with the implementation of its Business Plan:
- The first farm-out in deep waters is already signed (Trion)
- First two onshore farm-outs (Ogarrio and Cárdenas-Mora)
- Additional farm-outs Nobilis Maximino and Ayín-Batsil
- Alliances for non-PEMEX’s fields with major Oil & Gas companies
- Pemex Industrial Transformation first partnerships for hydrogen supply
- Gasoline, diesel and natural gas price liberalization
- Pemex Logistics has successfully completed the first stage of the Open Season

**With the Energy Reform in place and stable finances, PEMEX has the historic opportunity to modernize and remain as Mexico’s flagship company**
Content

A Snapshot of PEMEX

Upstream

Midstream & Downstream

Overall Financial Performance

Business Outlook
Financial Outlook: Scenarios with Realistic Premises

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 balance and production goal

1 Source: Bloomberg (October), Company’s website and Pemex.