Investor Presentation

January 2018
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 2015

56% O&G
22% Coal
11% Biofuels and waste
11% Other

1 Btoe: billion tons of oil equivalent
2 Includes geothermal, solar, wind, heat and electricity trade.

PEMEX: The Most Important Company in Mexico

8th Crude oil producer

Main producer of oil, gas and refined products in Mexico

16th Refining company worldwide

Holder of 95% of the country’s 1P reserves

Key player in hydrocarbons logistics infrastructure

More than 17,000 km of pipelines

MXN 1.4 trillion annual revenues

Largest Tax Contributor in Mexico

18th largest oil company

152nd largest company

170th most valuable brand

6 Refineries in Mexico and one in the U.S.A.

9 Gas Processing Complexes

2 Petrochemical Complexes

74 Storage and distribution terminals

1,485 tank trucks

17 Ships with transportation capacity of 4,618 Mb

258 Operating platforms

9,000 Wells

11,710 Service stations

1 Source: Petroleum Intelligence Weekly, Top 50 Rankings of the World’s Oil Companies, November 2017
2 Last five years average (2012-2016)
3 Source: Fortune 500 ranking, 2017
5 As of September 30, 2016, 11,710 retail service stations operated in Mexico under the PEMEX brand.
PEMEX’s Reserves

PEMEX holds 95% of Mexico’s hydrocarbon reserves

Long description of PEMEX’s 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)

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 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 without a partner of the fields Ek and Balam in shallow waters
- Improvement in fiscal regime for fields that were non-profitable after taxes
- Joint venture with Air Liquide for the supply of hydrogen to the Tula refinery
- PEMEX’s non-used capacity in the NW pipelines was offered through the first Open Season and it 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 MXN 174 billion (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
Upstream: Current Status and Challenges

- PEMEX continues to be a main player in the O&G industry
- The challenge has been replacing Cantarell to stabilize and eventually increase production
**Industry Cost Leader**

- Exploitation strategies focused on shallow waters have allowed PEMEX to maintain very competitive production costs, as compared to most of its peers.
- 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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<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

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

- Underinvestment and limited access to know-how has restricted intensive exploitation of new complex frontiers

Deepwater Infrastructure\(^1\)

Shale Potential\(^2\)

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1. Source: National Geographic
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

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mbd</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

<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>
<th>7 clusters</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>Will be part of a new bidding process</td>
<td></td>
<td></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>
<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>
<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>
<td>To be defined</td>
</tr>
<tr>
<td><strong>3P Reserves (MMboe)</strong></td>
<td>485</td>
<td>93</td>
<td>54</td>
<td>502</td>
<td>359</td>
<td>392</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>
<td>Medium Light 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>
<td>Onshore</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>To be defined</td>
<td>To be defined</td>
<td>To be defined</td>
</tr>
</tbody>
</table>
Upstream: Recent Developments

**Trion & Block 3**

- BHP Billiton will invest up to 1.9 billion dollars before PEMEX makes additional contributions.
- Joint operating agreement was signed on March 3, 2017.
- PEMEX expects to invest 600 million dollars 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 3.4 million dollars.
- No wells were committed for this contract.
- Contract was signed on February 28, 2017.
Upstream: Upcoming Developments

Additional farm-outs

**Nobilis-Maximino**
- 3P Reserves: 502 MMboe
- Type of hydrocarbons: Light crude oil
- Water Depth: 3,000 meters (deep waters)
- Contract type: To be defined
- Will be part of a new bidding process to be defined in 2018

**Ayín-Batsil**
- 3P Reserves: 359 MMboe
- Type of Hydrocarbons: Heavy crude oil
- Water Depth: 80 - 170 meters (shallow waters)
- Contract type: To be defined
- Will be part of a new bidding process in the first half of 2018
## Upstream: Upcoming Developments

### Seven Clusters

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Reserves (MMboe)</th>
<th>Oil Type</th>
<th>Area (Km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1P</td>
<td>2P</td>
<td>3P</td>
</tr>
<tr>
<td>Juspí</td>
<td>26</td>
<td>37</td>
<td>114</td>
</tr>
<tr>
<td>Bedel-Gasifero</td>
<td>90</td>
<td>111</td>
<td>119</td>
</tr>
<tr>
<td>Cinco Presidentes</td>
<td>29</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Giraldas-Sunuapa</td>
<td>69</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>Bacal-Nelash</td>
<td>10</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>Artesa</td>
<td>14</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Lacamango</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Juspí**: 26, 37, 114 MMboe, Light, 450 km²
- **Bedel-Gasifero**: 90, 111, 119 MMboe, Medium, 1,165 km²
- **Cinco Presidentes**: 29, 40, 41 MMboe, Light, 167 km²
- **Giraldas-Sunuapa**: 69, 71, 71 MMboe, Light, 1,727 km²
- **Bacal-Nelash**: 10, 12, 21 MMboe, Light, 117 km²
- **Artesa**: 14, 22, 23 MMboe, Light, 890 km²
- **Lacamango**: 3, 3, 3 MMboe, Medium, 16 km²

**Legend**
- Exploration Cluster
- Extraction Assignment
- Asset
- Assignment that doesn’t belong to the cluster
PEMEX discovered the largest onshore reservoir in 15 years: Ixachi-1

- Result of great exploration efforts and investments over the last 30 years
- Original volume of 1,500 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
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.

**Gasoline Storage Days by Country**

<table>
<thead>
<tr>
<th>Country</th>
<th>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>

**Pipelines in the United States and in Mexico**

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

**Infrastructure**

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Refineries in Mexico</td>
<td>1,942 Mbd²</td>
</tr>
<tr>
<td>and one in U.S.A.</td>
<td></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-scheduled shutdowns 2016**

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

Non-Scheduled Shutdowns Index

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>10.1</td>
</tr>
<tr>
<td>2014</td>
<td>11.2</td>
</tr>
<tr>
<td>2015</td>
<td>12.7</td>
</tr>
<tr>
<td>2016</td>
<td>26.3</td>
</tr>
<tr>
<td>2017</td>
<td>31.9</td>
</tr>
</tbody>
</table>

- 1 From Pemex Industrial Transformation
- 2 Capacity in Mexico is 1,602 Mbd, Deer Park capacity is 340 Mbd.
- 3 Million cubic feet per day.
- 4 Tons per year
- 5 Average January – September
- 6 January – August 2016, as published in the 2017-2021 Business Plan
Midstream & Downstream: Business Plan

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

PEMEX Industrial Transformation
- Partnerships in operation of auxiliary services 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
- Focus 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) -108.9
Partnerships 41.9
Safe and reliable operations 49.2
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; all the country has liberalized fuel prices since November 30, 2017

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

It auctioned 20% of its capacity in Baja California and Sonora, and awarded it to Tesoro

Stage 1.2: North Zone Border System
Winners will be announced on March 14, 2018

Assigned capacity
Next stage
Will be assigned during 2018

1 At fees 10% above the minimum required
Content

A Snapshot of PEMEX

Upstream

Midstream & Downstream

4 Overall Financial Performance

Business Outlook
Financial Performance

- Operating income as of the third quarter of 2017 averaged 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

- Accumulated positive net result as of September 30, 2017 for the first time 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

104 USD/b

43 USD/b

0 20 40 60 80 100 120
0 20 40 60 80 100 120
19

Net Result 1, 2

MXN billion

1 January – September average per year.
2 Financial information is reported under IFRS; Audited Quarterly Results, except 1Q17, 2Q17 and 3Q17 (preliminary)
Net indebtedness for 2017 was used to cover the financial deficit. The objective for 2018 is to **limit net indebtedness to the financial deficit**, in line with the Business Plan.

- **2018 debt ceiling:**
  - MXN 144 billion (≈USD 8 billion)
- **2018 financial deficit:**
  - MXN 79 billion (≈USD 4 billion)

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

**Net Indebtedness Trend**

Note: All numbers in billion pesos; exchange rate: 18.4 pesos per dollar
PEMEX’s 2017 Financing Activities

- **February 2017** – EUR 4.25 billion in three tranches:
  - EUR 1.75 billion at 2.500% due in August 2021
  - EUR 1.25 billion at 3.750% due in February 2024
  - EUR 1.25 billion at 4.875% due in February 2028

- **July 2017** – liability management transaction:
  - Reopening of two reference bonds due in 10 and 30 years at 5.75% and 6.90%, respectively. 3x oversubscribed.
  - Repurchase of bonds totaling USD 1.739 million due in 2018 and 2019, to improve the amortization profile and increase the average debt maturity.

- **November 2017**:
  - GBP 450 million at 3.750% due in 2025
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>
</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 U.S. Treasuries

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
- Hedge 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)
- Alliances for non-PEMEX’s fields with major oil & gas companies
- Pemex Industrial Transformation first partnership 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 itself and remain as Mexico’s flagship company**
Financial Outlook: Scenarios with Realistic Premises

2017 marks an inflection point:

- Primary Surplus (first time since 2012): MXN 8.4 billion
- Attainable Production Platform: 1.944 MMbd
- Conservative Price Projection: USD 42 per barrel

Recently, PEMEX has exceeded its financial balance and production goals

1 Source: Bloomberg (January 2018) and PEMEX.