Centro de Investigación Económica y Presupuestaria, A.C.
Evolution, status and challenges of the Mexican fiscal framework towards an energy transition

Alejandro Limón Portillo

Agora Expert Workshop:
The Energy Transition in Mexico:
Fundament for social inclusion and prosperity
8 April - Berlin Energy Transition Dialogue 2019
Every public policy needs a budget.
Current Mexican fiscal environment

Fiscal Budget 2019
Fiscal space

“Room in a government’s budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy.”

– Peter Heller (IMF, 2005).

\[(\text{Public income}) - (\text{Unavoidable expenditure}) = \text{Fiscal space}\]
Public income

- Income tax: 7.0% GDP
- Oil revenue: 4.2%
- VAT: 4.0%
- Excise tax: 1.8%
- CFE: 1.7%
- IMSS: 1.4%
- Others: 1.1%

Total: 21.1% GDP

Unavoidable expenditure

- Contribution to states: 6.7% GDP
- Social security institutions + Pemex + CFE: 4.8%
- Pensions: 3.5%
- Debt: 3.1%

Total: 18.1% GDP

(21.1%) – (18.1%) = 3.1% of GDP to implement public policy

Note: 1% of Mexican GDP accounts for 11,600 million EUR.
Oil revenue

Source: Centro de Investigación Económica y Presupuestaria, with data of the Ministry of Finance (SHCP).
<table>
<thead>
<tr>
<th>Year</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
<th>PEF</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>1.3</td>
<td>1.6</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
<td>1.8</td>
<td>1.3</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>2.7</td>
<td>2.7</td>
<td>3.4</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>1.8</td>
<td>2.5</td>
<td>3.4</td>
<td>1.9</td>
<td>3.7</td>
<td>2.4</td>
<td>1.9</td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>1.9</td>
<td>2.5</td>
<td>3.7</td>
<td>2.3</td>
<td>3.7</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Centro de Investigación Económica y Presupuestaria, with data from the Ministry of Finance.
Public debt

Federal Government debt:
- Internal financing (+1.9%) +
- Energy firms deficit (-24%) –
- Social security firms surplus (+16)
  = 2.0% GDP

Others* = 0.5% GDP

Public sector debt (RFSP 2019):
- Federal Government debt +
- Others =
  2.5% GDP

Accumulated RFSP = 45.3%
Costo financiero de la deuda ejercido y aprobado

Fuente: Elaborado por el CIEP, con información de la SHCP (Datos Abiertos, Cuenta Pública y Paquetes Económicos).

% PIB

PEF Obs
2013
1.7 1.6
PEF Obs
2014
1.8 1.7
PEF Obs
2015
1.7 1.7
PEF Obs
2016
1.8 1.8
PEF Obs
2017
1.9 1.9
PEF
2018
2.0
PPEF
2019
2.2

Turismo
Deuda Pública
Apoyo a Ahorradores y Deudores
Petróleos Mexicanos
Comisión Federal de Electricidad
Public income and expenditure of the Mexican energy sector

Fiscal Budget 2019
Public sector oil revenue:
Oil tax & rights + Pemex own revenue

Public sector oil revenue can be recognized by Pemex and the Federal Government:

• **Oil rights**: tax and royalties on hydrocarbon public firms (of which Pemex contributes to 95.8%) and private firms (4.2%).

It is collected by the Ministry of Finance, and then distributed to the Public Budget.

• **Pemex own revenue**: Resources generated by Pemex, who keeps them for its own purposes.
Key points on energy public income 2019

‑ **Pemex increase** their revenue by 10.4%.

  A) Reduce fiscal burden (0.16% GDP, per year, for six years)
  B) Renegotiation of labor liabilities (0.14% GDP)
  C) Extra funding by the Ministry of Energy (0.10% GDP)
  D) Savings derived from the fight against fuel theft (0.13% GDP)

‑ **Mexican Oil Sovereign Fund**: 95.6% of its resources are not earmarked and thus, finance the Public Budget. The rest goes to Stabilization Funds.

‑ Fuel excise tax from initial 1.1% GDP calculated, to 0.8%, due to fiscal incentives.
### Projections on mid-term oil revenues (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pemex</td>
<td>2.1</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>FMP</td>
<td>2.1</td>
<td>1.9</td>
<td>1.7</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Total oil revenue</td>
<td><strong>4.2</strong></td>
<td><strong>3.8</strong></td>
<td><strong>3.5</strong></td>
<td><strong>3.8</strong></td>
<td><strong>3.8</strong></td>
<td><strong>3.8</strong></td>
</tr>
</tbody>
</table>
Key points on the evolution of public energy expenditures 2019

- **Pemex**
  - National Refining Plan (new oil refinery + maintenance of National Refining System)
  - National Hydrocarbon Production Plan (from 1,700 mbd to 2,400 mbd)
  - Pemex increases expenditure on hydrocarbon infrastructure by 42.8%, vs 2018.
    - It represents 44% of its budget, vs 35% in the previous year.

- **CFE**
  - National Power Plan
    - Maintenance of infrastructure increases + 200%.
    - Transmission and distribution decreases - 21%
    - Generation of electricity diminishes by - 5%
Key points on the evolution of public energy expenditures 2019

- **Ministry of Energy (SENER)**
  - 92% of its budget allocated to the hydrocarbon department

- **Energy and Hydrocarbon Regulatory Commissions (CRE & CNH)**
  - Budget decreased by 31%

- **Others**
  - National Commission of Energy Efficiency -19%
  - National Institute of Clean Energy -9%
  - National Institute of Nuclear Research -5%
  - Electricity department (SENER) -17%
  - Energy Transition Planning department (SENER) -18%
Conclusion & closing remarks

- The new budget for 2019 reinforces investments in PEMEX with a focus on short term production and refining activities.
- Focus in power sector is refurbishment of existing generation assets, rather than grid extension.
- Mexico’s public budget does not allow to finance the investments that Mexico needs in the Oil & Gas nor in the Energy Sector.
- Given the tighten fiscal space, shouldn’t we be taking advantage of the legal & regulatory scheme that allows for private investment?
Thank you for your attention!

Vielen Dank für Ihre Aufmerksamkeit!

¡Muchas gracias por su atención!
Annex
Tax revenue collected (%GDP)

Sources: Centro de Investigación Económica y Presupuestaria (CIEP), 2019.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income tax</th>
<th>VAT</th>
<th>Fuel excise tax</th>
<th>Others (&lt;1% GDP)</th>
<th>Excise tax (non-fuel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5.1</td>
<td>3.8</td>
<td>-0.4</td>
<td>-1.3</td>
<td>0.6</td>
</tr>
<tr>
<td>2011</td>
<td>5.2</td>
<td>3.7</td>
<td>-1</td>
<td>-0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>5.1</td>
<td>3.7</td>
<td>-1.3</td>
<td>-0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>2013</td>
<td>5.8</td>
<td>3.4</td>
<td>-1</td>
<td>-0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>2014</td>
<td>5.5</td>
<td>3.8</td>
<td>-1</td>
<td>-0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>2015</td>
<td>6.6</td>
<td>3.8</td>
<td>-0.4</td>
<td>-1.2</td>
<td>0.5</td>
</tr>
<tr>
<td>2016</td>
<td>7.1</td>
<td>3.9</td>
<td>-0.7</td>
<td>-1.4</td>
<td>0.7</td>
</tr>
<tr>
<td>2017</td>
<td>7.2</td>
<td>3.7</td>
<td>-0.7</td>
<td>-1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>2018</td>
<td>7.1</td>
<td>3.9</td>
<td>-0.7</td>
<td>-1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>2019</td>
<td>7</td>
<td>4</td>
<td>-0.7</td>
<td>-1.1</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Ingresos Tributarios 2017

<table>
<thead>
<tr>
<th>País</th>
<th>Federales</th>
<th>Locales</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARG</td>
<td>17.9</td>
<td>5.5</td>
</tr>
<tr>
<td>BRA</td>
<td>14.0</td>
<td>9.8</td>
</tr>
<tr>
<td>CHL</td>
<td>17.1</td>
<td>1.6</td>
</tr>
<tr>
<td>DEU</td>
<td>11.1</td>
<td>12.0</td>
</tr>
<tr>
<td>ESP</td>
<td>13.6</td>
<td>8.4</td>
</tr>
<tr>
<td>MEX</td>
<td>13.1</td>
<td>0.9</td>
</tr>
<tr>
<td>NOR</td>
<td>21.6</td>
<td>6.0</td>
</tr>
<tr>
<td>OECD</td>
<td>19.5</td>
<td>5.1</td>
</tr>
<tr>
<td>USA</td>
<td>12.1</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Fuente: Elaborado por el CIEP con información de la OCDE