Petroleos Mexicanos

Frequently asked questions about standalone credit quality, link to sovereign rating, and government production targets

» **PEMEX's b3 Baseline Credit Assessment (BCA)** reflects a number of risks for the standalone credit quality of Mexico's national oil company. Declining production and proved reserves, a heavy tax burden, negative free cash flow and high financial leverage vastly outweigh the company's large scale, strong access to oil and gas resources, and dominant role in the Mexican energy industry. Low capital spending and high costs have limited PEMEX's efforts to arrest its production decline and achieve stability.

» **The government of Mexico's current energy agenda** will likely strain PEMEX's standalone credit quality, over time increasing its exposure to lower-margin fuel production and reduce exports of crude. Because the government wants PEMEX to develop the energy industry by itself, it has suspended future farmouts, potentially limiting PEMEX's ability to benefit from more capital and operating expertise from private companies.

» **If we lowered PEMEX's BCA to caa1,** we could still maintain its investment-grade Baa3 rating if government support appeared sufficient and timely. We are focused on PEMEX's first and second quarter 2019 operational and financial results to help us assess how the company is tracking toward its targets.

» **A downgrade of Mexico's A3 sovereign rating could lead to a downgrade of PEMEX's Baa3 rating, though not necessarily.** A deterioration in the government’s credit quality would be a key factor in our assessment of its support for PEMEX and the corresponding amount of uplift that PEMEX's ratings would draw from that support.

» **The government has multiple means to support PEMEX in case of need, such as easing the company's capital spending or tax burdens, or injecting capital.** For 2019, the government has budgeted $13.6 billion for capital investment in crude production and refining, a significant increase. But while delaying the new refinery would benefit PEMEX’s credit quality, any cuts in upstream capital would hinder its production targets. The government could also reduce PEMEX’s tax burden - roughly $26 billion for 2019.

» **PEMEX probably cannot meet the government’s ambitious production growth targets without a vast improvement in capital efficiency and production costs.** Even if the company boosts capital investment and production, the effort raises the danger that PEMEX will accelerate the depletion of existing proved reserves but fall short on replacing them.
**Q: What are the biggest risks to PEMEX’s b3 Baseline Credit Assessment?**

*Petroleos Mexicanos* (PEMEX, Baa3 stable) b3 Baseline Credit Assessment (BCA)—our measure of a company’s standalone credit strength, regardless of government support—reflects a number of risks that Mexico’s national oil company faces today: declining production and proved reserves, a heavy tax burden and resulting negative free cash flow, and high financial leverage. These risks vastly outweigh the benefits of the company’s large scale, access to oil and gas resources, and dominant role and integrated operations in the Mexican energy industry.

PEMEX has been making efforts to arrest its production decline and achieve stability, but low levels of capital investment and high costs have held back these efforts. The company reduced negative free cash flow and the pace of debt increases in 2018, but much of that improvement came from stronger oil prices.

Continued declines in oil and gas production and material increases in net debt could both lead us to lower our BCA for PEMEX. The company is acutely vulnerable to lower oil prices because of its large exports. Lower revenues would require PEMEX to cut its capital spending and make greater reductions in its operating expenses, assuming no further supportive measures from the government. These measures would in turn strain PEMEX’s production volumes and its ability to replace reserves.

The company’s high debt levels also entail substantial refinancing risk for its upcoming debt maturities. PEMEX’s debt maturities in 2019-21 are equivalent to about 25% of its total debt outstanding, without considering pension liabilities (see Exhibit 1).

PEMEX’s spending needs for 2019 will come very close to the cash it has available for them (see Exhibit 2). If PEMEX has to rely heavily on its cash balance and its $8.4 billion in committed facilities ($7.7 billion available as of December 2018) to refinance debt, and cannot effectively refinance its maturities in the capital markets, then both its BCA and Baa3 long-term rating would come under pressure.

Under such conditions, our consideration of government support would become even more important to PEMEX’s ratings.

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**Exhibit 1**

One-quarter of PEMEX’s debt matures during 2019-21

As of December 31, 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>USD billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$3.0</td>
</tr>
<tr>
<td>2020</td>
<td>$9.6</td>
</tr>
<tr>
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<td>$9.3</td>
</tr>
<tr>
<td>2022</td>
<td>$8.7</td>
</tr>
<tr>
<td>2023</td>
<td>$8.5</td>
</tr>
<tr>
<td>2024</td>
<td>$59.3</td>
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</tbody>
</table>

The $3 billion amount for 2019 includes bank facilities and accrued interest.
Source: PEMEX

**Exhibit 2**

PEMEX’s 2019 planned spending and financing needs consume its available cash and revolver

Data as of December 31, 2018

<table>
<thead>
<tr>
<th>Year</th>
<th>USD billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>$11.9</td>
</tr>
<tr>
<td>2020</td>
<td>$33.2</td>
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<td>2026</td>
<td>$-9.7</td>
</tr>
<tr>
<td>2027</td>
<td>$-0.5</td>
</tr>
</tbody>
</table>

Notes: Support package from government include $750 million in tax relief, $1.3 billion capital injection, release of $1.8 billion long-term government promissory note. EBITDA includes $10 billion in royalties/other government transfers and estimates for oil price of $55/bbl. Capex estimate based on IFRS
Source: PEMEX; Moody’s Investors Service

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PEMEX has been under closer creditor scrutiny since 2015, when oil prices collapsed and oil companies around the globe had to adjust expenses and capital investments in response to lower revenue. More recently, Mexico’s new administration has changed the country’s energy agenda, raising concerns about the company’s business model, refining investment plans, oil and gas production, cash generation, capital structure and ability to access external funding.

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PEMEX’s Baa3 ratings are based on its b3 BCA and six notches of uplift from our Joint Default Analysis, which incorporates our assumptions of very high government support in case of need, and very high default correlation between PEMEX and the government of Mexico (A3 stable) (see Exhibit 3).

Exhibit 3
PEMEX’s long-term rating fell out of step with government of Mexico in November 2015, after oil-price collapse

Q: How does Mexico’s new energy agenda affect PEMEX’s BCA?

The government’s current energy agenda will likely strain PEMEX’s standalone credit quality primarily by increasing its exposure over time to lower-margin fuel production and reducing exports of crude. The government wants Mexico to be self-sufficient in refined products, and plans to build a new $8 billion refinery within three years, raising the country’s current 1,627,000 barrel-per-day (bpd) refining capacity from its existing six refineries by 340,000 bpd, more than a 20% increase. Even so, the country will still be a net fuel importer based on projections of growth in fuel demand.

According to the Ministry of Energy, in 2018 demand for gasoline and diesel in Mexico averaged 1,174,000 bpd, but refining capacity utilization was low at about 40%, and imports averaged 911,000 bpd. But Mexico would still be an importer of fuel if demand continues to grow at its 3% average annual rate since 2014, even if its refining capacity utilization reaches PEMEX’s 80% minimum target—beneath the 90% level for optimum profitability—and gasoline and diesel together make up a 70% share of Mexico’s fuel production, up from 51% today.

The new administration has more recently recognized the importance of the E&P (upstream) business to PEMEX’s financial results. PEMEX’s upstream business line is the only one that has generated operating profit for several years. The government wants upstream capital investment to double in 2019 from 2018; it also wants production to stabilize in 2019 from 2018 and reach 2,624,000 bpd by the end of 2024.

Yet even if PEMEX managed to reach this ambitious level of production, its exports would still shrink by about 27% to 876,000 bpd, down from 1,184,150 bpd today, with more oil directed toward fuel production. Lower exports would increase foreign exchange risk because of less hard-currency revenue available to hedge the company’s $92 billion in hard currency debt.

Meanwhile, PEMEX’s increased fuel production could hamper the company’s cash flow. PEMEX’s downstream business has historically posted operating losses and would require high levels of operating efficiency to be profitable. Moreover, it is unclear whether PEMEX could count on subsidy mechanisms to offset market prices below costs. Today the government’s fuel policy is linked to inflation, not import parity. In addition, larger upstream and downstream investments could also prevent the company’s much-needed debt reduction.

Because the government wants PEMEX to develop the energy industry by itself, it has suspended future farmouts, a type of business contract where oil companies share operating risk with partners. Going forward, PEMEX may no longer additionally benefit from much needed capital and operating expertise from private companies.
Such factors would raise PEMEX’s credit risk and strain its BCA unless it can otherwise reduce debt enough to strengthen its financial profile, or make other improvements in fundamental operating performance.

**Q: If you lower PEMEX’s BCA, would you automatically downgrade its long-term rating too, and when will you next review PEMEX’s ratings?**

If we lowered PEMEX’s BCA to caa1, we could still maintain its rating at an investment-grade Baa3 based on our considerations of government support under rating methodology for Government Related Issuers (GRI). We constantly monitor rated companies’ credit profiles and can take rating actions whenever we deem it necessary. With respect to PEMEX, we are focused on its first and second quarter 2019 operational and financial results to help us assess how the company is tracking toward its targets.

To keep PEMEX’s investment-grade rating intact, we would need evidence that government support will remain sufficient and timely. Otherwise the factors that lead us to reduce PEMEX’s BCA could also lead us to downgrade its Baa3 long-term rating. We use the GRI methodology to assess the probability of government support to its companies in case of need. A GRI analysis considers the size of the company, its importance in its sector, its cross-default risk with the government, its reputational risk, and the possible economic consequences of a default, among other factors.

Now that the new administration has re-emphasized PEMEX as the primary vehicle to develop the oil and gas sector, it appears unlikely that we would lower our assessment of “very high” likelihood of government support—the highest possible level in our GRI methodology. This assessment continues to be supported by PEMEX’s size, its relevance to Mexico’s energy industry and its entire economy. However, we evaluate support based on willingness, ability and timeliness, so in our assessment, we continue to focus on the government’s actions and its speed.

PEMEX’s management has set ambitious targets for 2019 in terms of production, negative free cash flow and limited increases in net debt that would support its b3 BCA. The company’s historic operating inefficiency does present an opportunity for management to deliver improved operational and financial results. Therefore we will monitor the company’s first and second quarter operational and financial results to assess how the company is tracking toward the targets management has laid out. Significant negative performance against the plan, including falling production volumes or large increases in net debt, or other new material information, could result in a rating action on the company’s outlook, BCA and/or Baa3 rating.

**Q: Would a downgrade of Mexico’s sovereign rating trigger an automatic downgrade of PEMEX’s rating?**

A downgrade of Mexico’s A3 sovereign rating could lead to a downgrade of PEMEX’s Baa3 rating, though not necessarily. There is a circular and symbiotic relationship between the government of Mexico and its major and most indebted company, which is a key consideration in our rationale for each issuer’s own rating.

A downgrade of the government would not trigger an automatic downgrade for PEMEX, whose rating would continue to reflect its intrinsic risk and our view of government support. But a government downgrade based on a deterioration in its credit quality would be a key factor in our assessment of its support for PEMEX, and the corresponding amount of uplift that PEMEX’s ratings would draw from that government support. In such a case, we would base our rating decision on PEMEX in part on the driver for the sovereign downgrade—for example, its explicit support of PEMEX—and any corresponding changes to PEMEX’s intrinsic credit risk.

**Q. How might the government support PEMEX in case of need?**

The government has multiple means to support PEMEX in case of need, such as easing PEMEX’s capital spending or tax burdens, or injecting capital. For 2019, the government has budgeted $13.6 billion for PEMEX capital investment, in government accounting terms (about $11.0 billion in IFRS terms). But while a delay in investment in the new refinery would benefit PEMEX’s credit quality, any cuts in upstream capital would hinder its production targets. The government could also reduce PEMEX’s tax burden—roughly $26 billion in 2019 in the form of royalties, duties, taxes, and other costs.

The government could also inject cash or capital into PEMEX, provide guarantees, or try to encourage banks to lend to the oil company. While banks appear to have reached their maximum appetite for PEMEX, they might be compelled to increase their exposure to the oil company, measured by their current loans to PEMEX as a proportion of total capital.
In aggregate, in 2019 PEMEX will benefit from a support package of $3.9 billion (see Exhibit 4), announced by the government recently. In 2016, during the oil price crash, the government provided a rescue package of $4.2 billion to PEMEX, at the time a solid demonstration of support. For 2019, the current administration has so far announced that it will inject MXN25 billion ($1.3 billion) in capital to support PEMEX’s investments in the new refinery, and promised a tax reduction to PEMEX of MXN15 billion ($750 million) (see Exhibit 4). In 2019 PEMEX can also redeem MXN35 billion ($1.8 billion) in long-term government notes receivable that were originally granted to reduce the company’s pension liabilities; the total outstanding in long-term government bonds in September 2018 was MXN135 billion, or $6.9 billion.

### Exhibit 4

Mexico’s government is easing PEMEX’s tax burden in 2019

<table>
<thead>
<tr>
<th></th>
<th>April 2016</th>
<th>February 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital injection</td>
<td>$1.5</td>
<td>$4.2</td>
</tr>
<tr>
<td>Cash-out of promissory notes related to pension liability</td>
<td>$2.7</td>
<td>$3.9</td>
</tr>
<tr>
<td>Tax relief</td>
<td>$1.3</td>
<td>$0.8</td>
</tr>
<tr>
<td>Total debt</td>
<td>$85.0</td>
<td>$105.1</td>
</tr>
</tbody>
</table>

Source: PEMEX

### Q. Can PEMEX achieve the government’s oil and gas production targets for 2019 and 2024, and can the company reduce costs enough to stabilize production and reserves in 2019?

PEMEX probably cannot meet the government’s ambitious production growth targets without a vast improvement in its capital efficiency and cost structure, considering how much it could need to spend to stabilize its production and reserves. The effort to ramp up production raises the danger that PEMEX will accelerate the depletion of existing proved reserves but fall short on replacing those reserves.

Mexico’s government expects PEMEX to stabilize oil and gas production at 2018 levels, or 1,713,000 barrels, by the end of 2019, and to reach 2,624,000 barrels in December 2024. To reach these targets, PEMEX will focus on shallow waters and onshore oil fields (both mature and recently discovered), spend more capital on upstream development, and reduce operating costs. The company plans to spend $11 billion in total investments in 2019 (IFRS accounting), of which it would direct $8.6 billion toward upstream—more than twice the amount that PEMEX spent on E&P in 2018. By contrast, capital spending will remain largely stable at Latin American national oil companies Petrobras (Ba2 stable) of Brazil and Ecopetrol (Baa3 stable) of Colombia (see Exhibit 5). PEMEX also contemplates further increases in capital spending after 2019 to achieve its 2024 target.
PEMEX’s capital spending is set to rise, but total crude production is still falling

PEMEX’s operating costs are higher than for its regional peers. Despite their greater operating challenges, such as operating in deep waters or less prolific oil fields, Ecopetrol reports lower lifting costs than PEMEX and Petrobras has reached parity in 2017 (see Exhibit 6). Both peers have more successfully grown production and efficiently replaced reserves in recent years. The $8.6 billion that PEMEX plans to invest in upstream in 2019 would only be enough to stabilize production if its finding and development costs decline significantly. Because Mexico’s new administration is focused on reducing expenses and bureaucracy, it is possible that the company’s new management will be at least somewhat successful in reducing operating costs and increasing capital efficiency. However, if PEMEX keeps its finding and development costs at 2017-18 levels, we estimate that it would have to spend about $15 billion in E&P capital investments to stabilize production and reserves. Despite higher capital spending in 2019 from 2018, we think PEMEX is unlikely to achieve the government’s production growth targets without a vast improvement in capital efficiency.

PEMEX’s approach to boosting production risks accelerating the depletion of existing proved reserves, while falling short on replacing reserves. This shortfall would give PEMEX a short-term increase in production but accelerate the decline in PEMEX’s reserve life. We will assess the new management’s progress on reserve replacement when it provides annual reserves information for 2019 in early 2020.
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Outlook:

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» Non-Financial Corporates — Latin America: 2019 Outlook (slides), December 5, 2018

» Integrated Oil and Gas — Global: Expectation of moderate fall in EBITDA in 2019 keeps outlook stable, September 26, 2018

» Oil and Gas Industry — Latin America: EBITDA will grow at solid pace through 2019, but capital investment still limited, May 22, 2018

Rating methodologies:

» Government-Related Issuers, June 2018

» Global Integrated Oil & Gas Industry, October 2016

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REPORT NUMBER

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