

Energy (Oil & Gas)/Mexico  
Credit Analysis

Petróleos Mexicanos — PEMEX

Ratings

Security Class	Current Rating	Previous Rating	Date Changed
IDR (FC)	BBB-	NR	4/24/06
IDR (LC)	BBB	NR	4/24/06
National Scale (mex)	AAA	NR	10/27/03

IDR – Issuer default rating. FC – Foreign currency.  
LC – Local currency. NR – Not rated.

Rating Watch.....None  
Rating Outlook.....Stable

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Profile

PEMEX is engaged in the exploration and production of crude oil and natural gas; the refining, marketing and transportation of crude oil and refining products; and the production of petrochemicals, as well as various other hydrocarbon-related activities. The UMS is the company's sole shareholder.

Related Research

- Credit Analysis, "United Mexican States," Dec. 8, 2005.

Key Credit Strengths

- Integrated operating structure.
- Significant upstream reserves.
- Crude oil exporter.

Key Credit Concerns

- High tax burden limits financial flexibility.
- Political interference risk.
- Large capital-expenditure requirements.
- Commodity price risk.

Rating Rationale

The ratings of Petróleos Mexicanos (PEMEX) reflect a solid pretax financial and export-oriented operating profile, an attractive upstream cost structure, its fiscal importance to the sovereign and its dominant domestic market position. The rating also reflects PEMEX's significant debt levels, sizable but declining proven hydrocarbon reserves, negative net worth position, substantial tax burden, large capital-investment requirements and exposure to political interference risk. The rating also incorporates Fitch's concern regarding a shifting of debt from the sovereign to PEMEX, as the company's substantial tax burden relative to revenues has forced it to seek external funding for an aggressive capital-investment budget, and the lack of an explicit sovereign guarantee on PEMEX's debt. As a state-owned oil company, PEMEX's foreign currency rating remains highly linked with the credit profile of the UMS, whose foreign currency issuer default rating (IDR) is 'BBB'.

Over the past several years, there has been a shifting of debt from the sovereign to PEMEX as the company's substantial tax burden relative to revenues has forced the company to seek external funding for an aggressive capital investment budget. Total debt at June 30, 2006, was MXP611.8 billion (US\$54.3 billion). PEMEX's stand-alone financial measures, such as debt to EBITDA of 0.9 times (x) and EBITDA to interest of 14.5x through June 2006, are consistent with other investment-grade energy companies. However, the company's other operating statistics, particularly its hydrocarbon reserve measures, are moving in a negative direction and in opposition to the other major integrated players. PEMEX's average reserve replacement rate over the past three years was only 25% of production. Offsetting this trend continues to be one of management's key long-term strategic objectives. Reserve replacement should increase in the coming years as the company undertakes certain development projects, specifically in the Ku-Malooob-Zaap fields.

Last year, the Mexican Congress approved a new fiscal regime for PEMEX that became effective in 2006 and should somewhat help improve the company's financial condition, support increased investment and modestly strengthen its competitive position. The new fiscal regime's variable duties are designed to provide PEMEX with realized savings regardless of the price of crude (i.e., different values of crude are taxed at variable rates). PEMEX management estimates tax reduction savings of US\$1 billion–US\$2 billion in the first year and an average of US\$3 billion–US\$4 billion in annual savings over the first five years. These savings should allow the company to

finance a portion of its large capital-expenditure program with internally generated funds. The company is likely to continue utilizing third-party financing to increase debt levels, given expected annual capital investment of more than US\$14 billion. A substantial portion of these investments is to maintain production, while the reserve base is expected to continue to decline, at least in the short term.

While the change in PEMEX's fiscal regime is positive, there are still significant reforms that need to be made in the energy sector. The larger concerns are the need for changes in corporate governance, increased autonomy and an ability to enter into joint ventures and partnerships. PEMEX suffers from numerous inefficiencies and very high administrative and operating costs, reflecting a lack of transparency and accountability in the management process. PEMEX also remains subject to government approval of investment plans and strategies, as its budget is part of the federal budget, thus limiting the company's ability to affect its business development. In order to reduce the effect of these inefficiencies on PEMEX's operations and financial results, a movement toward best practices in corporate governance has been sought. Such changes were linked to the fiscal regime sent by President Fox back to the Congress in September 2005, but these provisions have been eliminated from the most recent version due to political opposition. As mentioned previously, Fitch believes PEMEX may have difficulty achieving its long-term exploration, development and production targets absent additional reform.

Given that PEMEX's proved reserve portfolio exhibits a declining trend, offsetting this trend continues to be one of management's key long-term strategic objectives. Recently, PEMEX has maintained an ambitious investment strategy but has not been as successful in achieving its targets in light of underinvestment in crude and natural gas production, primarily due to budgetary constraints. Going forward, certain exploration and development opportunities (primarily deepwater) are likely to require participation by third parties in the form of technical expertise and/or capital, yet constitutional provisions prohibit third-party participation at this time.

PEMEX's upstream expenditures should be sufficient to maintain and slightly improve production over the near and medium term, although continued declines

in the company's reserve base could ultimately begin to affect production levels over the medium to long term. PEMEX has not been able to translate higher international oil prices into increased investment or debt reduction, two common elements found throughout the international energy sector, which highlights concerns regarding the achievement of prospective long-term operating targets. Energy sector reform or changes in PEMEX's corporate governance may allow the company to meet its long-term growth strategy more ably; self-finance the majority of its projects, possibly a portion with partners; and support its ability to meet the energy needs of Mexico.

#### ■ Business Profile

The UMS is PEMEX's sole shareholder. As the national oil company of Mexico, PEMEX is responsible for the strategic planning and management of the country's hydrocarbon industry. While Mexico is the owner of the country's petroleum and other hydrocarbon reserves, PEMEX has the exclusive right under Mexican law to exploit the country's hydrocarbon resources.

Through its various subsidiaries, the company engages in the exploration and production of crude oil and natural gas; the refining, marketing and transportation of crude oil and refining products; and the production of petrochemicals, as well as various other hydrocarbon-related activities. A limited partnership with Royal Dutch Petroleum/Shell Transport & Trading (Royal Dutch/Shell, rated 'AA+' by Fitch) in the 340,000 barrels per day (bpd) Deer Park refinery in Texas constitutes the company's sole international operating venture.

Since 1938, most activities related to Mexico's petroleum sector have been reserved for the state, with PEMEX and its subsidiaries enjoying exclusive rights to exploit and develop all hydrocarbon-related reserves. In 1995, activities associated with the storage, distribution and transportation of natural gas were opened to third-party providers (i.e., private and/or social-sector companies). Two years later, federal authorities required that PEMEX divest its existing natural gas distribution assets. Nonetheless, the company retains the exclusive right to explore, exploit, produce and sell to the initial purchaser of natural gas, as well as transport and store natural gas when those activities are inextricably linked with upstream operations. PEMEX also retains exclusive

rights over the production of natural gas derivatives classified as basic petrochemicals.

PEMEX is the single most significant corporate entity in Mexico, accounting for more than one-third of total federal revenues and supplying more than 80% of the nation's total energy requirements. This unique role within the economy can blur the line between corporate business strategies and government policy objectives, injecting significant uncertainty over the stability of long-term corporate strategic priorities. Moreover, the interpretation of what constitutes the maximization of shareholder value may affect long-term corporate financial flexibility adversely. The less than arm's length relationship between PEMEX and its shareholder underscores the company's exposure to cash flow redirection risk, namely that resources could be distributed out of the company to satisfy governmental or political needs. PEMEX's former fiscal regime and its material increase in debt in recent years highlight this concern.

PEMEX suffers from numerous inefficiencies and higher administrative and operating costs, reflecting a lack of transparency and accountability of the management process. PEMEX also remains subject to government approval of investment plans and strategies as its budget is part of the federal budget, which limits the company's ability to affect its business development. In order to reduce the effect of these inefficiencies on PEMEX's operations and financial results, a movement toward best practices in corporate governance has been sought. Such changes were linked to the first fiscal regime sent by President Fox back to the Congress in 2005, but these provisions were eliminated from the final version due to political opposition.

Mexico's presidential candidates have acknowledged the potential for increasing private investments in the energy sector. While various legislative reforms to allow private investment in the energy sector have been considered in the past, Congress has not passed the main reforms that would open the sector. Even with the new president in office, Fitch expects that congressional opposition will make any meaningful energy sector reform difficult to achieve. As mentioned, Fitch believes that without further reform, PEMEX may have difficulty improving efficiency, lowering costs and achieving its long-term exploration, development and production targets.

#### ■ Corporate Strategy

PEMEX's strategic objectives reflect the Fox administration's emphasis on modernization and transparency and encompass the following general objectives: to increase the hydrocarbon reserve base, emphasizing light and medium crudes and nonassociated natural gas; to increase hydrocarbon and related product output; to optimize refining capacity; and to restructure and integrate the company's petrochemical business. PEMEX also remains focused on modernizing Mexico's regulatory framework, following the successful approval by the government of the new fiscal regime.

PEMEX has maintained an aggressive investment strategy over the past several years but has not been as successful in achieving its targets. PEMEX's most recent forecast targets daily production rates of 3.30 million barrels of crude oil per day for 2006 (down from an original 2006 target of 4.0 million bpd as presented in 2004). Similarly, the company now forecasts natural gas production for 2006 at 5.3 billion cubic feet per day (Bcfd), down from previous expectations of 6.0 Bcfd. The targets were originally set at the beginning of the Fox administration but have turned out to be rather optimistic in light of lack of flexibility to allow third-party investment in the petroleum sector, energy sector reform and underinvestment in crude production due to budgetary constraints and the low participation rates of the multiple service contracts (MSCs) for natural gas development. Original assumptions were based on projected total annual capital expenditures of US\$15 billion–US\$20 billion compared with actual expenditures of US\$10 billion–US\$12 billion annually.

In terms of PEMEX's hydrocarbon asset base, the company's proven reserve replacement rate has been relatively stable in the low-20% range since 2003 (26% in 2005) with similar results expected in 2006. Management projects the company's proven reserve replacement ratio should increase to 77% by 2010; however, in practice, actual results have lagged previous projections. The majority of the increase in proven reserves is expected to come from the incorporation of current development projects (i.e., reclassification of probable reserves to proven). Capital expenditures for exploration are projected to average US\$2.2 billion through 2010.

## ■ Reserves and Production

Upstream operations constitute PEMEX's principal source of revenue, accounting for 50% of sales in 2005. The company generates revenues from oil sales to PEMEX Refinancion, in Mexico, and from exports through PMI Comercio Internacional, S.A. de C.V. (PMI). Additionally, PEMEX generates revenues from natural gas sales in Mexico. Approximately 45% of crude oil production is sold to the company's refining facilities.

PEMEX's proved hydrocarbon reserve base remains sizeable at 16.5 billion barrels of oil equivalent (BOE), yielding a proved crude oil reserve life of 10 years as of Dec. 31, 2005 (last reported figures). PEMEX has applied the U.S. Securities and Exchange Commission (SEC) definitions of proven reserves since September 2002, when the company announced the downward revision of its proved crude oil and natural gas reserve base in compliance with SEC filing guidelines. The SEC's definition of proved hydrocarbon reserves includes the certainty that they will be developed in the medium term, assuming existing technology and economic conditions.

As of Dec. 31, 2005, PEMEX's SEC-adjusted proved crude and condensates reserves totaled 13.7 billion barrels, down 7% from 14.8 billion barrels as of Dec. 31, 2004. Oil and condensates accounted for 83% of the nation's total proved hydrocarbon reserve base, with the balance related to natural gas. Approximately 70% of the proved crude reserves are developed.

As noted, PEMEX's proved reserve portfolio exhibits a declining trend. Crude oil reserves declined by 1.13 billion barrels, reflecting 1.35 billion barrels of production, 25 million barrels in discoveries and 197 million barrels of revisions. Over the past 12 years, the company's proven, probable and possible (3P) reserve replacement ratio has averaged a very low 30%.

Offsetting this trend continues to be one of management's key long-term strategic objectives. The company ramped up investment, particularly in exploration and production, to approximately US\$10 billion from an average of US\$1.8 billion in the 1980s and 1990s. In 2005, the number of exploratory wells decreased by 28%, and the number of development wells increased by 7% from the prior year. PEMEX's average exploration success rate for the past four years is approximately 50% (compared with 53% in 2005), and average finding costs from 2003–2005 were US\$7.61 per BOE.

An estimated 11% of PEMEX's US\$11.1 billion 2005 upstream capital-expenditure program and 9% of its 2006 upstream program are earmarked for exploratory activities. This percentage should remain stable in upcoming years.

An estimated 60% of Mexico's oil is located offshore in the Campeche Sound. The Northeastern Marine Region, encompassing the Cantarell and Ku-Maloob-Zaap fields, is the nation's leading hydrocarbon asset, accounting for 50% of total proved oil equivalent reserves and 71% of total 2005 crude output. Cantarell is PEMEX's most prolific field,

## Proved Crude Oil and Natural Gas Reserves

(As of Jan. 1)

Year	Region	Crude Oil (Bil. Barrels)			Natural Gas (Tril. Cubic Feet)	
		Heavy	Light	Extra-Light	Associated	Nonassociated
2005	Total	8.20	3.83	0.84	14.02	6.41
	NE Marine	7.62	0.05	0.00	4.33	0.01
	SE Marine	0.22	0.82	0.18	1.38	0.94
	North	0.34	0.66	0.05	1.90	2.98
	South	0.02	2.30	0.61	6.41	2.48
2004	Total	9.09	4.22	0.82	14.93	5.81
	NE Marine	8.52	0.07	0.00	4.68	0.00
	SE Marine	0.21	0.86	0.12	1.52	0.57
	North	0.31	0.63	0.02	1.75	2.40
	South	0.04	2.65	0.68	6.97	2.83
2003	Total	9.81	4.46	0.85	15.87	5.76
	NE Marine	9.30	0.05	0.00	4.85	0.00
	SE Marine	0.18	1.02	0.12	1.71	0.55
	North	0.27	0.59	0.02	1.63	2.19
	South	0.06	2.79	0.72	7.67	3.01

NE – Northeast. SE – Southeast. Source: Petróleos Mexicanos.

representing 61% of total 2005 crude oil production with estimated peak production in 2006 of 2.0 million bpd. PEMEX estimates production will decline 8% in 2006 to 1.86 million bpd and down to 1.68 million and 1.43 million bpd in 2007 and 2008, respectively, if required investment amounts are attained.

PEMEX expects to offset declining production at Cantarell primarily with increases at Ku-Maloob-Zaap, which should reach peak oil of 794 million bpd in 2010. Crude oil in this field is slightly heavier than crude from Cantarell, implying a steeper discount from West Texas Intermediate (WTI) if exported and a higher cost to refine if processed domestically. Lower output at Cantarell may also be compensated by additional smaller projects that are coming online, including Crudo Ligerio Marino, Bermúdez Complex, Jujo-Tecominoacán and others, which should increase the production of light crude. PEMEX estimates that Mexico has significant exploration potential with an estimated 100 billion BOE, including 3P and prospective resources, primarily located in the deep water of the Gulf of Mexico and in southeastern Mexico, where the company has many existing operations.

Approximately 72% of crude oil production in 2005 was heavy crude. Through 2010, PEMEX is expected to focus its upstream capital investment on nonassociated gas (42%), heavy oil (37%) and light oil (21%), with the largest shift in investment from 2005 levels directed toward nonassociated gas, which represented 34% of 2005 upstream investment.

Despite increased investment in upstream, crude oil output declined to 3.33 million bpd in 2005, down 1.5% from 3.38 million bpd in 2004. The reduction primarily reflected the production shutdown at Cantarell related to Hurricane Emily, as well as the slowdown of production at Cantarell while Hurricanes Rita and Katrina limited the refining capacity on the U.S. Gulf Coast.

An estimated 72% of the crude produced was categorized as heavy (American Petroleum Institute [API] gravity of 11 degrees or more and less than 27 degrees). The proportion of heavy crude produced was relatively stable from comparable 2004 figures. Light oil production was up marginally, reflecting the completion of new wells. PEMEX expects the PEG Light Crude Oil Marine Project (Crudo Ligerio Marino) to result in increased production and export of lighter crude for 2006.

For 2005, PEMEX's average lifting cost was approximately US\$4.24 per BOE. Although in recent years expenses associated with gas injection have contributed to an increasing trend in average lifting expenses, the company's production cost structure remains competitive.

PEMEX exports a significant amount of its production through its subsidiary PMI, which provides international trading, distribution and related services. During 2005 and the first two quarters of 2006, 55% and 50% of PEMEX's crude oil production was exported. The United States was the principal destination, accounting for approximately 80% of total international sales. As a matter of policy, the vast majority of PEMEX's exports are generated through long-term supply contracts rather than spot market sales.

Approximately 87% of total oil exports were heavy crude oil. The presence of a heavier slate, largely composed of Maya (API 22 degrees), lowers the Mexican crude oil basket's aggregate value, yielding an average discount of US\$13.88 per barrel off the benchmark WTI Cushing during 2005.

In addition to declines in crude reserves, dry natural gas reserves declined slightly to 20 trillion cubic feet (tcf) as of Dec. 31, 2005, down from 20.4 tcf at December 2004, with 2005 production of 1.8 tcf. An estimated 61.3% of the total gas output was associated with crude oil production, down from 65.8% in 2004, illustrating the growth in nonassociated gas production. Despite the country's significant gas reserves, PEMEX is expected to remain a net importer of natural gas to meet demand growth.

To satisfy domestic demand and lessen imports, PEMEX's business plan includes an ambitious natural gas development effort, known by its Spanish acronym PEG (Strategic Gas Program), to increase nonassociated natural gas participation in the domestic supply. Through December 2005, PEMEX has invested MXP77.5 billion in PEG, with an additional MXP291 billion planned through 2016. The use of the MSCs for the development of nonassociated gas is a key component of this effort. While there has been political opposition in Congress to their use and limited interest from market participants, MSCs continue to be an important part of PEMEX's gas development program. Injunctions presented against the company have been resolved, allowing additional MSCs to be awarded going

forward. PEMEX expects natural gas production to grow to 5.3 billion cubic feet per day (cfd) in 2006 (this projection has also been reduced from the 2004 estimate of 6.0 billion cfd by 2006). Associated gas should be the largest component of increased production, followed by nonassociated.

■ **Downstream Operations**

PEMEX is responsible for guaranteeing the supply of petroleum products to the country. To meet its obligations, the company refines its own products and imports the balance, primarily from the United States. Refining operations contribute the second-largest share of revenues, after PEMEX Exploration and Production (PEP), accounting 46% of sales in 2005.

Downstream operations encompass six domestic refineries with an installed capacity of 1.54 million bpd (atmospheric distillation). As noted, PEMEX also holds a 50% interest in the Deer Park refinery. According to the partnership agreement, Shell Oil Co. and PEMEX (through P.M.I. Norteamérica, S.A. de C.V.) each supply 50% of the refinery's oil feedstock and own 50% of its output. Fitch does not anticipate additional cross-border refining investments in the near term.

Crude processing stood at 1.28 million bpd through December 2005 and was 1.5% lower compared with 2004 levels. Total refining production for the same

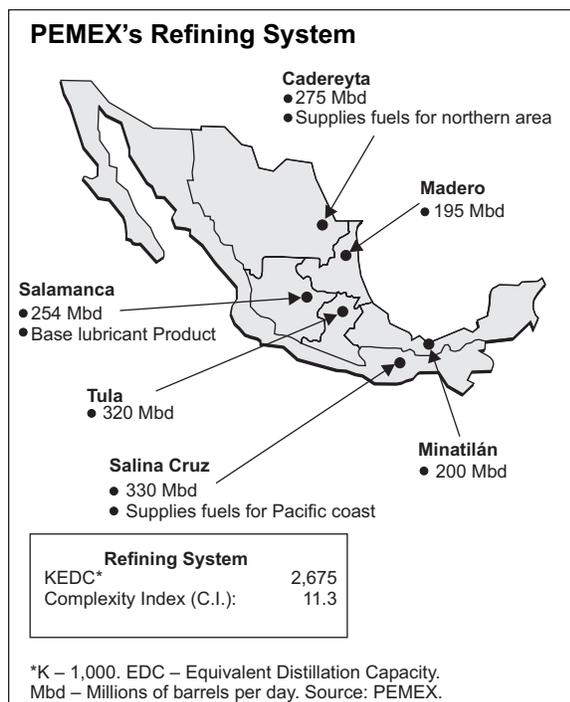
period was 1.554 million bpd, down 2.1% from the comparable period of 2004. Fuel oil, gasoline and diesel account for the majority of the segment's products. PEMEX continues to be a net importer of gasoline (approximately 25% of demand) and ultralow sulfur diesel in order to satisfy domestic needs. The company exports other products, primarily lower quality ones, but remains a net importer of total refined products.

To better meet domestic needs, the refining segment in recent years has shifted its focus from seeking to maximize throughput to maximizing value-added products. Improving product slate quality and making production decisions based on market economics have been central to this effort. Over the medium term, PEMEX's strategic program calls for increased heavy crude processing capacity, a shift in the product mix toward high-octane gasolines and middle distillates and the optimization of refinery crude oil feedstock blends.

Ongoing investments in the modernization and optimization of existing downstream facilities are expected to increase further the quality of refined products and reduce the cost of refining heavy crude, PEMEX's primary crude. Significant investment has been directed toward the Minatitlan reconfiguration program, with an estimated cost of approximately US\$2.4 billion. The project will increase Minatitlan's processing capacity by 150,000 bpd of heavy crude to 350,000 bpd and is expected to be completed by April 2008. The increased output will be destined for the domestic market, helping to offset product import requirements, which averaged 392 Mbpd in 2005. Nevertheless, Mexico is expected to remain a net product importer for the foreseeable future. Additionally, PEMEX is investing in its Tula and Salamanca refineries to fulfill the sulfur content specifications of gasoline in 2006–2008 and diesel in 2008.

PEMEX's subsidiary entities and the Comisión Federal de Electricidad (CFE) are the largest consumers of fuels in Mexico. In 2005, CFE consumed 78% of the company's fuel oil production and accounted for 9.2% of total consolidated domestic revenues from refining. Fuel oil demand has decreased in Mexico as CFE has been increasingly using natural gas to fuel its power plants.

PEMEX distributes gasoline and diesel at the retail level through a network of 7,172 franchised service stations (not owned) as of December 2005, up 7% from the prior year. As of Dec. 31, 2005, gasoline



and diesel retail prices have been fixed by the Ministry of Finance, so PEMEX does not benefit from the increase in international product prices. Since the beginning of 2006, PEMEX has recovered the increases in gasoline and diesel prices by credits in other duties and taxes. Through retail sales, PEMEX collects for the government a special tax on production and services (impuesto especial a productos y servicios [IEPS], essentially an indirect tax on domestic sales of gasoline and diesel). The tax represents mainly the difference between the fixed retail price and the international prices of these products and, therefore, fluctuates depending on the international prices. During 2005, the international price references have risen above the fixed retail prices, essentially creating a negative IEPS tax. PEMEX has been absorbing the difference in prices, since a negative IEPS is not feasible. The effect in 2005 totaled approximately US\$1 billion.

The financial results of the refining segment should generally continue to mirror the performance of its international competitors, but this sector used to suffer more during periods of high international prices given the fixed retail prices. Both feedstock and product costs are linked to specific international benchmarks. In addition, the company's internal transfer price for raw crude oil between the upstream and downstream is based on market indices. On the product pricing side, PEMEX earns a netback based on a Houston ship channel index price. These mechanisms suggest domestic refining margins will continue to reflect the volatility typically associated with major refining operations worldwide. Refining margins have increased 72% to US\$7.24 per barrel during 2005 from US\$4.27 in 2004 due to higher prices and the enhancement of the company's refining process capacity.

## ■ Petrochemicals

Petrochemicals sales accounted for 2% of PEMEX's total revenues in 2005. The company's petrochemical operations consist of 38 industrial plants located in eight petrochemical complexes. As of year-end 2005, petrochemical production decreased 1.2%, reflecting the gradual downsizing of operations due to shrinking domestic demand, increased competition and weak international petrochemical price fundamentals.

As noted, the company retains exclusive rights over the production and first-hand sale of nine basic petrochemicals. Since 1993, private investors (both domestic and foreign) have been allowed to own 100% of any petrochemical facility engaged in the manufacture of nonbasic petrochemicals. In the mid-1990s, PEMEX's petrochemical business was split into individual companies for the purpose of privatization of the nonbasic petrochemical facilities owned and operated by PEMEX. The plan had been derailed numerous times by political considerations, and the company has now decided to maintain its participation in this business. On May 1, 2006, PEMEX completed the process of merging seven of its subsidiary petrochemical companies, integrating the assets and liabilities, as well as the real estate, of these subsidiaries into PEMEX-Petrochemicals. The consolidation of PEMEX's petrochemical businesses should reduce overhead and improve administrative and operational efficiencies.

## ■ New Fiscal Regime

Until 2005, PEMEX's tax payments amounted to 60.8% of its revenues, siphoning off cash flow that could otherwise be used to support the company's ambitious investment program and resulting in net losses for the past five years. The previous tax structure resulted in a

### PEMEX Refining Production

(000 Barrels per Day, As of Dec. 31)

	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
Refinery-Grade Oil Runs	1,284.4	1,303.4	1,285.9	1,245.4
Refined Products				
Liquefied Petroleum Gas	30.6	28.0	33.8	31.3
Gasoline	455.1	466.7	445.2	398.2
Kerosenes	63.3	62.1	59.6	56.7
Diesel	318.2	324.7	307.8	266.9
Fuel Oil	350.8	368.0	396.5	449.6
Other	120.2	111.7	100.0	73.3
Total	1,338.3	1,361.2	1,342.9	1,275.9

Note: Numbers may not add due to rounding. Figures consider production from PEMEX Refinación and exclude production from PEMEX Gas y Petroquímica Básica. Source: Petróleos Mexicanos.

net loss in 2005, leaving the company's equity balance at –US\$2.5 billion. At June 2006, the equity balance improved and stood at –US\$900 million. A prolonged period of negative tangible net worth would be a material concern for Fitch.

A new fiscal regime has been designed to strengthen PEMEX's competitiveness and help improve its financial profile by changing the tax base from revenues to one of quasiprofit (allowing for certain deductions). In November 2005, the Mexican Congress approved a new fiscal regime after the previous draft was vetoed by President Fox. Concerns raised by President Fox included the allocation of excess duties to states and municipalities and the inclusion in the fiscal regime of the expectation for changes in corporate governance for PEMEX. The revised version of the fiscal regime incorporates these concerns and became effective on Jan. 1, 2006.

The new fiscal regime modifies the tax structure for PEP, which will be governed by the Ley Federal de Derechos while the other PEMEX companies will be governed by the Ley de Ingresos de la Federacion. The new fiscal regime will affect the level of contributions to the government.

The new fiscal law became effective on Jan. 1, 2006. The law applies to taxes on PEP and is composed of seven duties; the subsidiary entities will also be subject to a tax similar to a corporate income tax. The largest component would be an ordinary duty on hydrocarbon revenues minus certain deductions (including exploration, development and production costs) calculated under a sliding scale tax rate according to oil prices. For example, in 2006, the tax rate ranges from 78.68%–87.81% depending on the Mexican crude export price. This tax rate would become a stable rate of 79% from 2010 onward.

The second duty to be charged under the new tax regime is a duty on hydrocarbons for the Oil Revenues Stabilization Fund. This duty will be charged on the value of extracted crude at a rate ranging from 1%–10% based on the average export price of Mexican crude as long as the price is more than US\$22/bbl. This duty will be subtracted from the tax base for the ordinary duty on hydrocarbons.

The third duty will be an extraordinary duty on crude oil exports that will go toward the stabilization fund of the states' revenues. The duty will be 13.1% of the export value of crude in excess of the value estimated by the Mexican Congress for its budget. The duty will be credited against the duty on hydrocarbons for the Oil Revenues Stabilization Fund.

## PEMEX Duties

Duty	Calculation	Additional Information
Ordinary Duty on Hydrocarbons (ODH)	Sliding scale tax rate, (according to oil prices and year) on the value of extracted production minus certain deductions.	Deductions include certain exploration, development and production costs. This tax rate would become a stable rate of 79% from 2010 onward.
Duty on Hydrocarbons for the Oil Revenues Stabilization Fund (DHRSF)	1%–10% on value of extracted crude oil production based on the average export price of Mexican crude as long as the price is more than US\$22/bbl.	Will be subtracted from the tax base for the ODH.
Extraordinary Duty on Crude Oil Exports (EDE)	13.1% of the difference between the realized value of exports and the oil exports valued in the budgeted price.	Will be credited against the duty on hydrocarbons for the oil revenues stabilization fund.
Excess Gains Duty (EGD)	6.5% of the difference between the realized value of oil exports and oil exports valued at the budgeted price.	Will be credited against the duty on hydrocarbons for the oil revenues stabilization fund.
Duty on Hydrocarbons for the Fund for Scientific and Technological Research on Energy	0.05% on value of extracted production.	To fund Mexican Petroleum Institute (IMP).
Duty on Hydrocarbons for Fiscal Monitoring of Oil Activities	0.003% on value of extracted production.	To fund the Federal Auditing Entity (Auditoría Superior de la Federación).
Additional Duty	$[(\text{Target prod}-\text{actual prod}) \times (1-\text{deductions}/\text{actual prod})] \times \text{ODH rate} \times 16.32\%$	Only applied from 2006–2008 if actual production is below targeted production.

bbl – Barrel.

The fourth duty is the excess gains duty on crude oil exports, which will be calculated as 6.5% of the difference between the realized value of oil exports and oil exports valued at the budgeted price.

The fifth is the duty on hydrocarbons for the Fund for Scientific and Technological Research on Energy at a rate of 0.05% on the value of extracted production. The sixth duty is on hydrocarbons for fiscal monitoring of oil activities and the seventh is an additional duty in the event that actual crude production is less than the target production for a given year through 2008.

The new fiscal regime's variable duties are designed to provide PEMEX with realized savings regardless of the price of crude (i.e., different values of crude are taxed at variable rates). PEMEX management estimates tax reduction savings of US\$1.0 billion–US\$2.0 billion in the first year and an average of US\$3.0 billion–US\$4.0 billion in annual savings over the first five years. These savings should allow the company to finance a greater portion of its capital expenditures with internally generated funds. However, given expected annual capital investment of approximately US\$14 billion, the company is likely to continue utilizing third-party financing as well.

#### ■ Financial Profile

PEMEX's financial performance is affected by fluctuations in hydrocarbon-related commodity prices, a historically substantial tax burden, volatile refining margins, sizable ongoing investment requirements and the ability to access external funding sources. The company is vulnerable to potential cash flow redirection and political interference risks related to its ownership by the UMS.

PEMEX has a track record of managing its budgets according to conservative crude oil price assumptions. Although price collapse scenarios remain plausible, historically prices have been self-adjusting over reasonable time intervals as marginal producers quickly shutdown production that is not cash positive. Fitch anticipates that, while PEMEX's cash flows would be suppressed during low price intervals, the company's attractive cost structure virtually assures production would continue uninterrupted. A steadily rising debt burden, however, increases the company's exposure to a material downturn in oil prices and could constrain

#### Cash Generation and Tax Burden (MXP Mil.)

	2005	2004	2003
EBITDA	531,300	457,140	314,035
Free Cash Flow*	415,725	287,207	189,349
Taxes and Hydrocarbon Rights	560,415	433,614	288,366
% of EBITDA	105.5	94.9	91.8
% of Free Cash Flow			
Before Taxes	134.8	151	152.3

\*Free cash flow equals EBITDA less capital expenditures less cash interest plus change in operating working capital.

EBITDA – Operating income plus depreciation and amortization.  
MXP – Mexican peso. Source: Petróleos Mexicanos and Fitch estimates.

funding sources in a time of low cash flow generation.

Revenues through the second quarter of 2006 totaled MXP522.7 billion (US\$46.4 billion), up 21% in peso terms from MXP430.6 billion for the comparable period of 2005. The improvement reflects increases in both domestic sales and exports largely attributed to higher international oil prices and export volumes, as well as increased refining margins and sales volume of refined products.

Approximately 50% (US\$23.1 billion) of consolidated revenues through September 2005 were generated by export sales, highlighting PEMEX's hard currency origination capacity. The U.S. market is the company's principal export destination, followed by Europe, the Far East and the rest of America.

EBITDA excluding IEPS through June 2006 was up 33% to MXP397.3 billion (US\$35.2 billion) from MXP299.7 billion through June 2005. EBITDA to interest coverage remained acceptable for the rating category at 14.5x, up from 9.8x in 2005.

Total debt to capitalization remained high at 101.7% as of June 2006, compared with 105.3% at year-end 2005 and 93.6% at year-end 2004. The ratio reflects the increased leverage associated with PEMEX's ambitious capital-investment program, coupled with declining equity balance stemming from continuing net losses.

PEMEX's cash-generation ability is significant. Since 2001, annual free cash flow before taxes (i.e., EBITDA less capital expenditures less cash interest plus change in operating working capital) has been in the range of MXP200 billion, and it totaled

MXP415.7 billion at year-end 2005. Direct contributions to the shareholder are just as considerable. Between 2001 and 2005, hydrocarbon extraction duties and other taxes (including IEPS) averaged MXP346.4 billion annually, illustrating the drain on the company.

PEMEX has also had to pay to the government a duty equal to 39.2% of revenues from crude sales above the budget base price (the base price was US\$23.00 per barrel in 2005 and is US\$36.50 for 2006). Hence, PEMEX has been forced to rely heavily on external funding to carry forward its substantial program to expand oil and gas production and revamp its refineries. Positively, the use of these duties on sales over the base price in 2004 and 2005 helped finance the company's capital expenditures related to exploration, gas, refining and infrastructure. The company received approximately US\$3.0 billion in 2004, which was converted to paid in capital and offset the net loss for the year. Total reimbursement of this duty for 2005 was approximately US\$2.2 billion. The reimbursements in the third and fourth quarters of 2005 of approximately US\$1.6 billion were used for investments in 2006.

As noted, PEMEX's investment requirements, which require annual congressional approval, are significant, with 2005 capital expenditures of US\$10.8 billion and 2006 expenditures budgeted at US\$13.1 billion. Similar to 2005, approximately 85% is expected to be directed toward exploration and production. PEMEX management would like to maintain investment at or above US\$14 billion annually.

PEMEX's investment program is divided into two broad categories: Proyectos de Infraestructura Productiva de Largo Plazo (PIDIREGAS, long-term productive infrastructure projects) and non-PIDIREGAS. The former are off-balance-sheet projects funded through financing activities of the PEMEX Project Funding Master Trust, a Delaware-based vehicle rated 'BBB-' by Fitch, or directly by contractors. The latter refer to on-balance-sheet projects funded primarily through internal cash generation.

PIDIREGAS has increasingly become PEMEX's preferred investment mechanism, accounting for 83% of total capital expenditures in 2005, though this number is down from 90% in 2004. Through PIDIREGAS, PEMEX has continued to expand its exploration and production assets and upgrade its key

refineries to process heavy crude inputs and meet clean air mandates.

These projects, approved by the Mexican government, are off-budget items not subject to across-the-board budget restrictions. The most important are focused on increasing production at Cantarell, Mexico's largest single oil field and the primary source of Maya crude production, the Strategic Gas Program, and the Burgos natural gas fields in northern Mexico. The PIDIREGAS budget for 2005 was approximately MXP112.5 billion and for 2006 it is approximately MXP122.3 billion.

PEMEX's sizable capital-investment program requires the financial flexibility afforded not only by external financing but also by internal cash generation. The company's historical significant tax burden, however, has limited access to internally generated funds, forcing a growing reliance on external borrowings. Management considers this mix unsustainable and has repeatedly called for the modernization of the company's fiscal regime. Although the recent changes in the company's fiscal regime for 2006 might provide additional funds, this trend is expected to continue.

PEMEX's financial obligations, including PIDIREGAS, do not constitute an obligation of, and are not guaranteed by, the Mexican government. Nonetheless, it is important to note that the company's external debt has received *pari passu* treatments in previous sovereign debt restructurings.

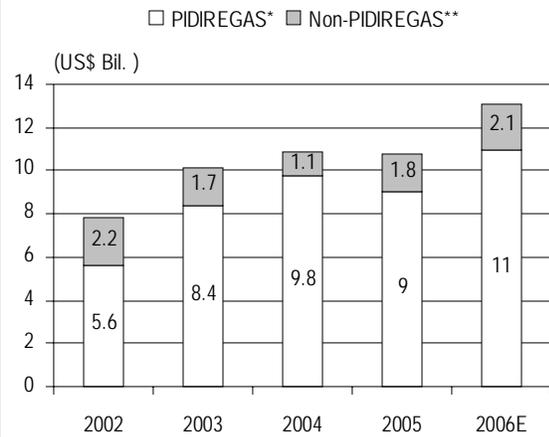
As of fiscal year-end 2005, PEMEX's total leverage equaled MXP537.7 billion, up from MXP507.9 billion in 2004. Debt increased further to MXP611.8 billion by June 2006.

PEMEX has cash balances of approximately US\$8.7 billion, primarily held at its financing vehicle, PEMEX Project Funding Master Trust. For 2007, the company is looking to design a strategy to use the cash available to meet its funding needs and potentially reduce its external financing requirements. As mentioned, PEMEX Project Master Trust is the vehicle used to issue debt for PIDIREGAS projects. When the trust issues debt, PEMEX has established that it will transfer sufficient cash to the master trust to meet its debt service.

The Ministry of Finance has agreed with the essence of the plan to make better use of available cash but does not yet have a mechanism to affect it. PEMEX

**Historical and Projected Capex**

(By Type of Project)



\*Long-term productive infrastructure projects. \*\*Budgetary investments. Capex – Capital expenditures.  
PIDIREGAS – Proyectos de Infraestructura Productiva de Largo Plazo. E – Estimated. Source: PEMEX.

is trying to make the process more efficient. Currently, all PIDIREGAS debt goes to the trust, but most of the expenditures go to PEMEX. Therefore, the company wants flexibility to move PIDIREGAS money to PEMEX accounts. Cash flow goes to PEMEX’s treasury and follows a waterfall to repay the trust’s obligations. Most of the money is at trust because of the timing of expenditures versus debt issuance, primarily as the company uses market opportunities and must follow many procedures to spend money, which slows the process of executing projects compared with other companies.

**Five-Year Amortization Schedule**

(US\$ Bil. As of June 2006)

2006	2007	2008	2009	2010+
3.3	5.4	4.9	6.7	29.5

Source: Petróleos Mexicanos.

Approximately 10% of PEMEX’s June 2006 obligations and 6% at June 2005 were characterized as short term. Approximately 81% of the company’s obligations were denominated in foreign currencies. PEMEX’s strong U.S. dollar cash flow generation ability substantially mitigates transfer and convertibility risk. For the next 12 months, the company faces debt maturities of US\$5.6 billion.

PEMEX has increased its access to the rapidly expanding Mexican debt capital market. Modeled on the PEMEX Project Funding Master Trust, the company has issued *certificados bursátiles* through a trust established in Mexico (Fideicomiso F/163). Of the approximate US\$9.5 billion raised during 2005, PEMEX obtained 40% via domestic market financings. Fitch believes tapping the local debt capital market offers PEMEX important benefits, including diversifying its funding sources and mitigating exposure to exchange risk by sourcing a portion of its financing requirements in local currency. The company is likely to continue following its 2005 strategy of tapping both the local and international capital market but weighted slightly toward international issuances.

Financial Summary — Petróleos Mexicanos

(MXP Mil., Year Ended Dec. 31)

	11.40	11.40	10.78	10.78	11.24	11.24	11.24
Exchange Rate MXP/US\$							
	Six Months Ended		2005	2004	2003	2002	2001
	6/30/06	6/30/05					
<b>Credit Statistics (x)</b>							
EBITDA/Interest Expense	14.5	9.8	10.0	13.9	13.4	10.2	11.1
[EBITDA – Capex]/Interest Expense	12.5	8.4	8.4	10.7	10.4	5.4	8.8
Total Debt/EBITDA	0.9	1.0	1.0	1.1	1.3	1.6	1.1
Net Debt/EBITDA	0.8	0.7	0.8	0.9	1.1	1.4	1.1
Total Debt/Capitalization (%)	101.7	95.1	105.3	93.6	90.1	76.0	64.0
<b>Profitability</b>							
Revenues	522,770	430,636	928,643	799,368	625,429	514,849	500,212
Revenue Growth (%)	21	—	16	28	21	3	7
EBITDA (Excluding IEPS)	334,869	263,796	531,300	457,140	314,035	207,098	192,811
EBITDA Margin (%)	64	61	57	57	50	40	39
DD & A	29,642	24,830	52,759	43,296	40,544	33,815	31,960
EBIT (Excluding IEPS)	305,227	238,966	478,541	413,844	273,490	173,283	160,851
Interest Expense	23,041	26,988	52,931	32,823	23,487	20,390	17,401
Hydrocarbon Rights and Production Taxes	287,676	248,637	560,415	433,614	288,366	191,529	189,000
Special Tax on Production and Services (IEPS)	0	15,950	20,214	56,528	94,076	122,437	106,931
Net Income	19,371	7,277	(76,281)	(26,344)	(40,644)	(24,574)	(30,396)
Return on Equity (%)	476	(7783)	(1,006)	(66)	(54)	(22)	(22)
<b>Cash Flow</b>							
Cash Flow from Operations	83,581	61,168	30,529	55,245	69,343	74,282	48,837
Change in Operating Working Capital	(129,082)	22,874	19,483	(31,746)	(30,570)	(14,024)	(14,770)
Net from Operating Activities	(45,501)	84,042	50,012	23,499	38,773	60,258	34,067
Capital Expenditures	(46,401)	(38,253)	(88,169)	(105,364)	(70,628)	(96,224)	(39,365)
Acquisitions and Divestitures, Net	—	—	—	—	—	—	—
Net Debt Proceeds	45,883	66,657	88,981	62,183	91,174	84,734	(5,091)
Net Equity Proceeds	8,400	(4,727)	52,227	28,892	—	42	598
Cash Dividends	(15,283)	(10,728)	(10,636)	(10,734)	(9,982)	(2,321)	(6,267)
Other	29,083	(61,843)	(59,289)	9,510	—	—	—
Net Change in Cash	(23,819)	35,148	33,126	7,986	49,336	46,489	(16,057)
Free Cash Flow*	(151,331)	(27,208)	(150,732)	(146,407)	(99,017)	(115,069)	(67,725)
Free Cash Flow Before Taxes	136,345	221,429	409,683	287,207	189,349	76,459	121,275
<b>Capital Structure</b>							
Cash and Marketable Securities	97,800	123,423	120,827	87,701	73,336	45,621	14,442
Short-Term Debt	63,089	32,120	36,095	50,779	59,391	53,105	37,503
Long-Term Debt	548,750	484,028	501,593	457,216	357,210	272,321	181,500
Off-Balance Sheet Debt	0	0	0	0	0	0	0
Total Debt†	611,839	516,148	537,688	507,995	416,600	325,426	219,002
Total Equity	(10,211)	26,496	(26,870)	34,454	45,861	103,906	122,866
Total Capital	601,628	542,644	510,818	542,449	462,461	429,332	341,869
<b>Liquidity (x)</b>							
Short-Term Debt/Total Debt (%)	10	6	7	10	14	16	17
Cash and Marketable Securities/Short-Term Debt	1.6	3.8	3.3	1.7	1.2	0.9	0.4
EBITDA/(Short Term Debt + Int. Expense)	6.1	6.1	6.0	5.5	3.8	2.8	3.5

\*Free Cash Flow=EBITDA-Capital Expenditures-Cash Interest-Taxes-Changes in Working Capital \*\*Reflects eight times gross rent expense plus securitization †Total debt includes off-balance sheet obligations and is used in credit statistics calculations and total capital. MXP – Mexican peso. US\$ – U.S. dollar. EBITDA – Operating income plus depreciation and amortization. Capex – Capital expenditures. IEPS – Impuesto especial a productos y servicios. DD & A – Depreciation, depletion and amortization. EBIT – Operating income. Note: Numbers may not add due to rounding.

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