

Estimation of Hydrocarbon Reserves as of January 1, 2006

This chapter shows the state of the hydrocarbon reserves as of January 1, 2006, with a nationwide approach. It shows the regional distribution of reserves, as well as their composition by fluid type and their historical evolution over the last four years. Particularly, the classification of the reserves is listed according to the quality of the oil and the origin of the gas, that is, associated or non-associated; the latter is broken down into reservoir type: dry gas, wet gas or gas-condensate.

The magnitude of the hydrocarbon reserves is a consequence of the field exploitation strategies and their associated investment and the behavior of the reservoirs, operation and maintenance costs, as well as hydrocarbon sales prices. All of the above is translated into investment projects with commercially exploitable production forecasts. Well drilling, new development projects, enhanced recovery projects, the results of exploratory activity and the production of all the wells contribute to updating reserves.

Additionally, this chapter also gives Mexico's position in the international petroleum sphere concerning the category of proved reserves for both dry gas and total liquids that include crude oil, condensates and plant liquids.

3.1 Hydrocarbon Prices

The profitability of investment projects is determined by considering the sales prices of the hydrocarbons to be produced, as well as the development, operation and maintenance costs necessary to carry out the exploitation of the reserves. Specifically, the value

of each one of the categories of reserves requires using forecasts for oil and gas production, hydrocarbon sales prices, and the operation and development costs. With these three elements, the economic limit of the exploitation of such reserves is obtained, that is, the point in time is determined when income and expenditure are matched, where the income is simply a forecast of production multiplied by the price of the hydrocarbon in question. In this respect, the reserves are the volumes of production of each well until the economic limit is reached. Hence the importance of hydrocarbon prices, together with the other elements mentioned.

Figure 3.1 shows the variation in the sales price of the Mexican crude oil mix and sour wet gas over the last three years. There was an upward trend in crude oil prices throughout most of 2005, reaching a maximum of 50.3 and 51.0 dollars per barrel in August and September, respectively, followed by a drop to 44.8 dollars per barrel at the end of the year. The annual average was 42.7 dollars per barrel, which was 38 percent higher than the previous year. In the case of sour wet gas, the prices in 2005 were 33 percent higher than in the previous year, with an average of 6.5 dollars per thousand cubic feet, and peaked in November at 9.2 dollars per thousand cubic feet, with a decline to 7.4 dollars per thousand cubic feet on December 31.

3.2 Oil Equivalent

As mentioned in the previous chapter, the oil equivalent is the way of representing the total hydrocarbon inventory. It includes crude oil, condensates, plant liquids and dry gas in its equivalent to liquid. The latter is

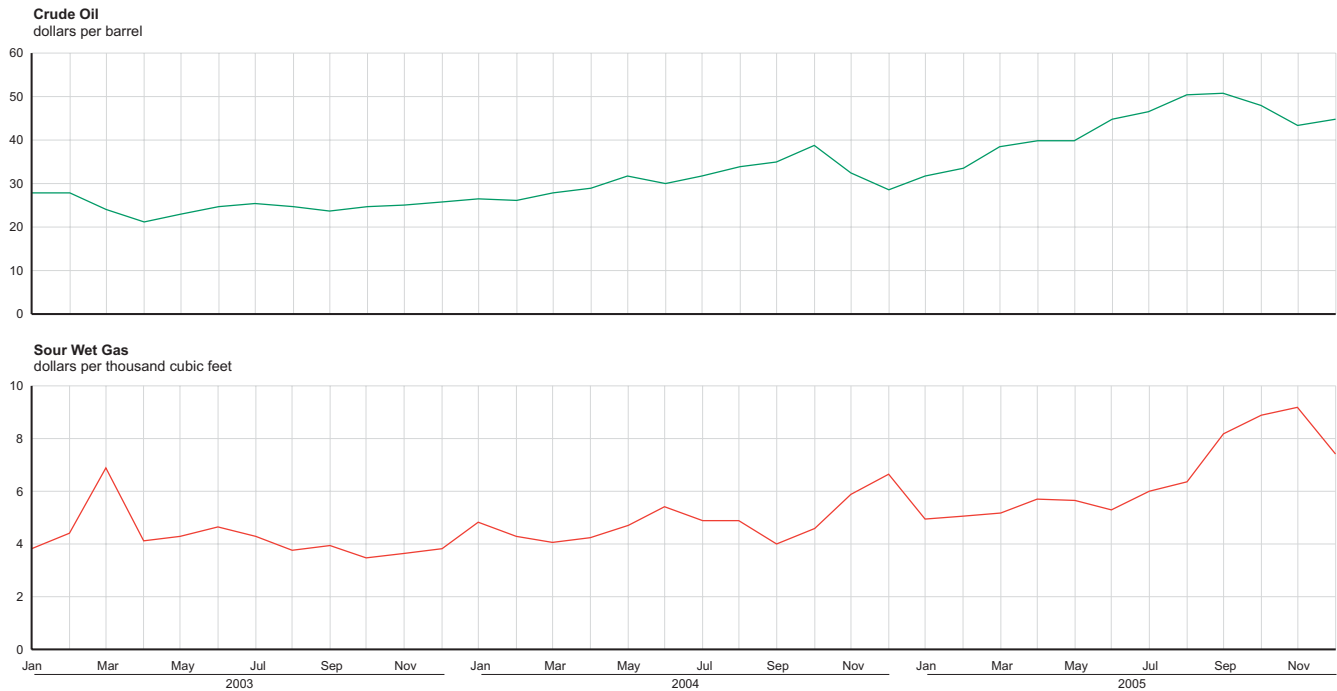


Figure 3.1 Historic evolution of prices for the Mexican crude oil mix and sour wet gas over the last three years.

obtained by relating the heat value of the dry gas, in our case the average residual gas in the Cactus, Ciudad Pemex and Nuevo Pemex gas processing complexes, with the heat value of the crude oil corresponding to the Maya type; the result is an equivalence that is normally expressed in barrels of oil per million cubic feet of dry gas.

The ways in which the facilities for handling and transporting natural gas from the fields of each region to the gas processing complexes were operated for the period of analysis are considered in the evaluation of the oil equivalent, in addition to the process to which the well gas were submitted at these petrochemical plants. During the operation, the gas shrinkages and yields at the Pemex Exploración y Producción facilities are recorded, with an identification of the atmospheric behavior of gas up to its delivery at the petrochemical plants for processing. Simultaneously, the condensate volumes are also measured at different surface facilities. Similarly, the shrinkage and yields of the gas delivered by Pemex Exploración y Producción in order to obtain dry gas and plant liquids are recorded in the gas processing complexes (GPC).

3.2.1 Gas Behavior in PEP Handling and Transport Facilities

The natural gas is transported from the separation batteries, if it is associated gas or from the well if it is non-associated gas, to the gas processing complexes when it is wet gas and/or contains impurities. The sweet dry gas is distributed directly for commercialization.

At some of the facilities, a fraction of the well gas is used as compression fuel and for transportation; this portion is known as self-consumption. The case may also arise when there are no facilities available for the handling and transporting of associated gas, or the facilities are insufficient, and consequently the gas produced, or part of it, is flared, thus reducing the gas sent to the processing complexes, or for commercialization.

The gas sent to the processing complexes undergoes temperature and pressure changes in transit, which gives rise to liquid condensation in the pipelines and this reduces its volume. The remaining gas after this potential third reduction, after self-consumption and

flaring, is what is actually delivered to the plants. Additionally, the natural gas liquids obtained in transportation, and which are known as condensates, are also delivered to the gas processing complexes.

These decreases in the handling and transport of gas to the processing complexes are quantitatively expressed by two factors; one is the handling efficiency shrinkage factor, *hesf*, which includes flared gas and self-consumption and the other is the transport liquefiabiles shrinkage factor, *tlsf*, which represents the volume decrease caused by condensation in the pipelines. The condensate recovery factor, *crf*, relates the condensate obtained to the gas sent to the plants.

The natural gas shrinkage and condensate recovery factors are calculated every month by using opera-

tion information at a field level in the Northeastern Offshore, Southwestern Offshore and Southern regions, and in the group of fields with shared processing for the Northern Region. The regionalization of the gas and condensate production sent to more than one gas processing complex is also considered. Figure 3.2 shows the behavior over the last three years of these three factors for all of the Pemex Exploración y Producción regions. The natural gas reduction, before being sent to the plants, is shown in the handling efficiency shrinkage factor graph. In 2005, the Northeastern Offshore Region reported a decrease compared with the previous year, due to the more than twofold increase in self-consumption and the almost threefold rise in injection in the Akal field. The Southwestern Offshore Region shows an increase in the use of gas. The Southern Region reports a decrease in

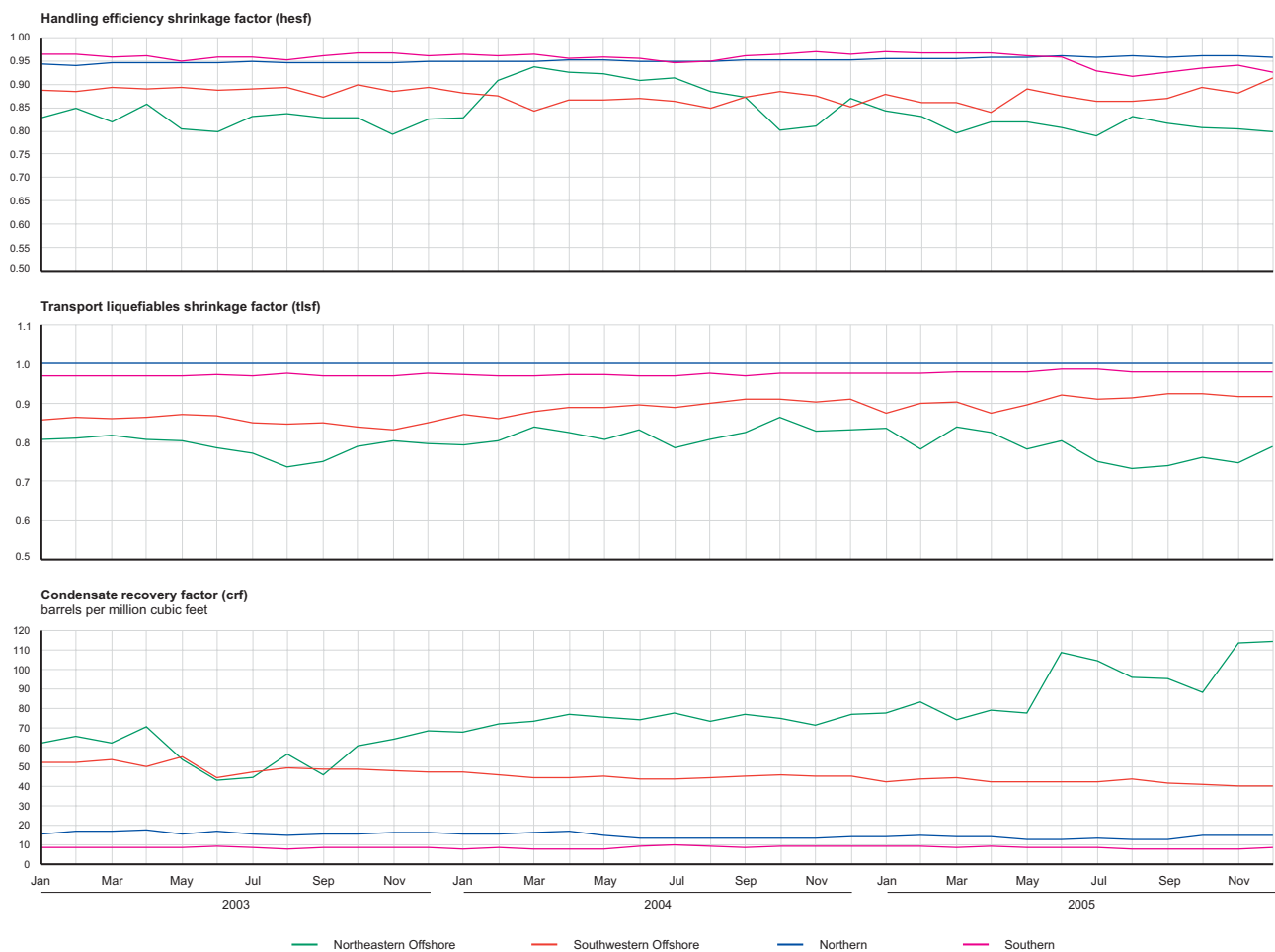


Figure 3.2 Gas shrinkage and condensate recovery factors, by region, of the national petroleum system.

the second half of the year. The Northern Region shows a slight increase in the use of gas.

As can be seen, the liquefiabls shrinkage, also shown in Figure 3.2, is practically constant for the Northern and Southern regions. The Southwestern Offshore Region reported less liquefiabls shrinkage and its curve showed an upward movement in 2005; the Northeastern Offshore Region reported annual average shrinkage of more than 3 percentage points in 2005 compared with the previous year. The condensate yield in the Northeastern Offshore Region increased substantially from an annual average of 74.3 barrels per million cubic feet in 2004 to 92.8 barrels per million cubic feet in 2005. The Southwestern Offshore Region showed slight decreases in the condensate recovery factor in 2005 compared with the previ-

ous year. The Southern Region was practically constant. The Northern Region showed a slight rise in the final quarter of the year.

3.2.2 Gas Behavior in Processing Complexes

The gas produced by the four Pemex Exploración y Producción regions is delivered to the Pemex Gas y Petroquímica Básica processing complexes in Arenque, Burgos, Cactus, Ciudad Pemex, La Venta, Matapionche, Nuevo Pemex, Poza Rica and Reynosa. The gas received at the processing complexes undergoes a sweetening process if the gas is sour; and then absorption and cryogenic processes, when the gas is wet. The plant liquids, which are liquefied hydrocarbons and dry gas (also known as residual), are ob-

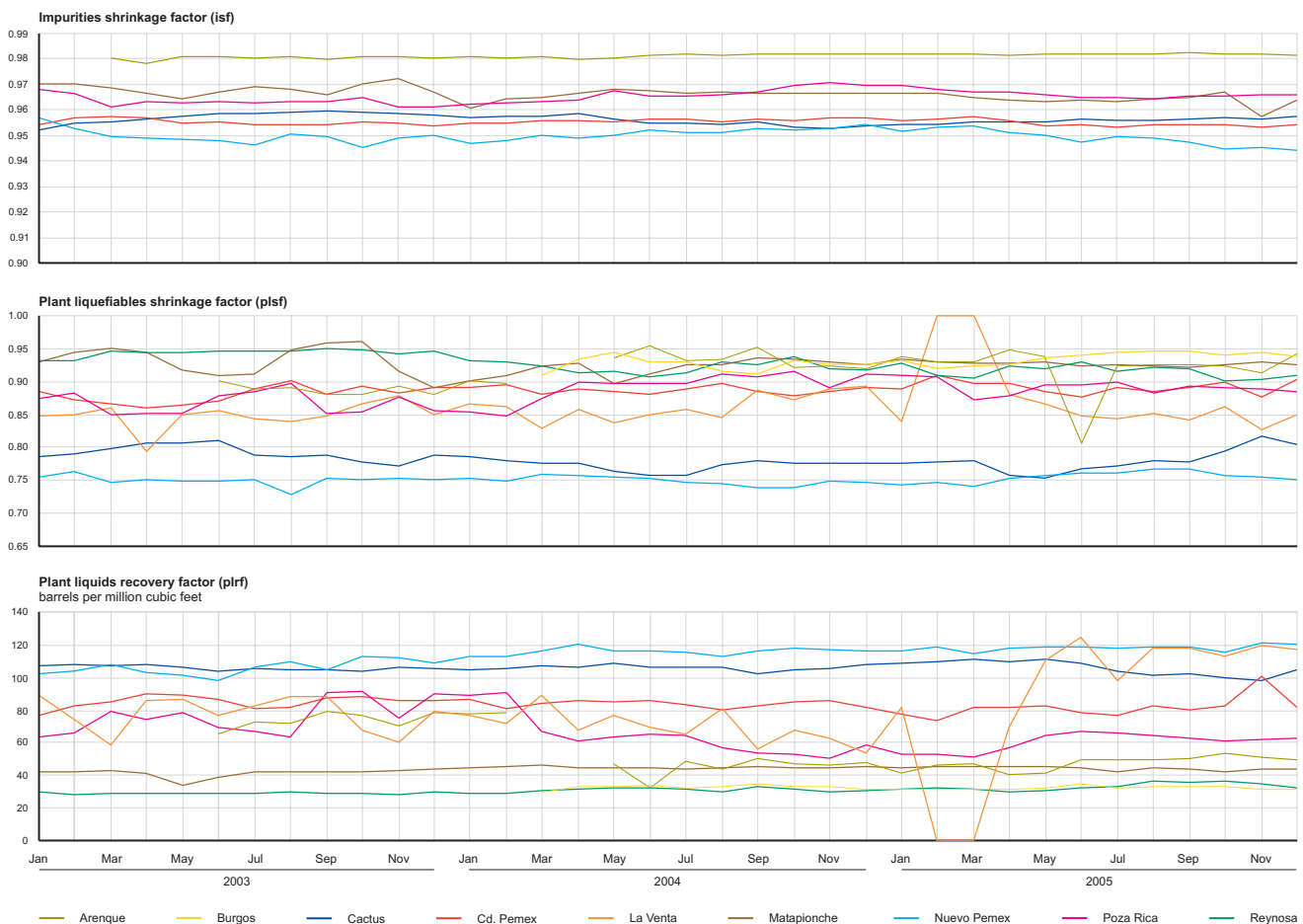


Figure 3.3 Gas shrinkage and liquids recovery factors in gas processing complexes where natural gas is delivered from the country's reservoirs.

tained by means of these processes. The gas reductions in these processes are expressed quantitatively as two factors: the impurities shrinkage factor, *isf*, that considers the effect of removing non-hydrocarbon compounds from the gas, and the plant liquefiables shrinkage factor, *plsf*, which considers the effect of separating liquefiable hydrocarbons from the wet gas. The liquids obtained are related to the wet gas by means of the plant liquids recovery factor, *plrf*.

These factors are updated every month with the operation information furnished by all the gas processing complexes mentioned in the above paragraph and their behavior is shown in Figure 3.3, where the evolution of the impurities shrinkage factor of the GPCs at Cactus, Ciudad Pemex, Matapionche, Nuevo

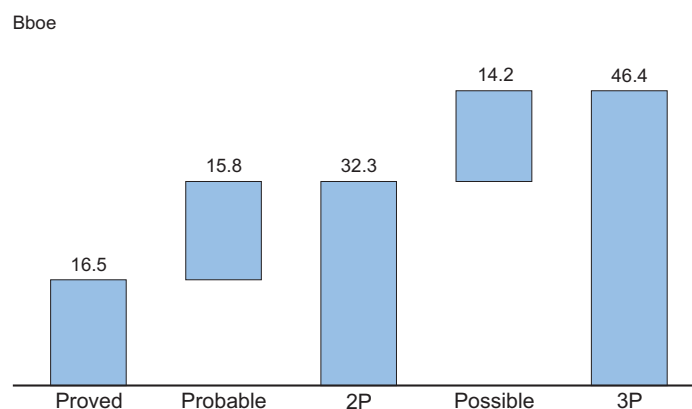


Figure 3.4 Integration by category of the remaining oil equivalent reserves of Mexico.

Pemex, Poza Rica and Arenque that receive sour gas can be seen. The La Venta, Reynosa and Burgos GPCs receive sweet wet gas; consequently, they are not shown. The intermediate part of Figure 3.3 shows the

Table 3.1 Historic distribution by fluid and region of remaining total reserves.

Year	Region	Remaining Hydrocarbon Reserves					Remaining Gas Reserves		
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003 Total		36,265.9	884.2	3,499.8	9,382.4	50,032.2	65,432.9	57,041.5	48,796.4
	Northeastern Offshore	15,299.9	448.3	439.8	759.1	16,947.0	6,919.5	5,022.7	3,948.0
	Southwestern Offshore	3,065.6	263.4	396.1	850.2	4,575.4	6,401.4	5,410.9	4,422.0
	Northern	13,300.8	47.1	1,476.7	5,965.1	20,789.7	38,746.5	34,210.5	31,023.6
	Southern	4,599.6	125.3	1,187.2	1,807.9	7,720.1	13,365.4	12,397.4	9,402.8
2004 Total		34,388.9	791.7	3,437.4	9,423.0	48,041.0	63,892.8	56,898.4	49,008.3
	Northeastern Offshore	14,040.2	341.6	437.2	731.6	15,550.6	6,437.4	4,878.1	3,805.2
	Southwestern Offshore	2,942.3	260.3	400.5	818.8	4,421.9	6,159.8	5,228.9	4,258.6
	Northern	13,195.5	62.8	1,497.4	6,129.2	20,884.9	38,973.7	35,200.8	31,877.5
	Southern	4,210.9	127.0	1,102.3	1,743.4	7,183.6	12,321.9	11,590.6	9,067.1
2005 Total		33,312.2	835.3	3,412.6	9,354.0	46,914.1	63,878.8	56,526.5	48,649.4
	Northeastern Offshore	13,200.9	420.6	439.7	720.4	14,781.6	6,094.2	4,752.9	3,746.8
	Southwestern Offshore	2,960.5	229.3	422.9	875.8	4,488.6	6,623.4	5,532.8	4,555.1
	Northern	13,127.4	65.4	1,498.6	6,114.7	20,806.1	39,583.3	35,113.1	31,802.0
	Southern	4,023.4	119.9	1,051.4	1,643.1	6,837.9	11,577.8	11,127.7	8,545.6
2006 Total		33,093.0	863.0	3,479.4	8,982.2	46,417.5	62,354.8	55,080.8	46,715.6
	Northeastern Offshore	13,566.4	509.6	421.1	696.4	15,193.5	6,188.5	4,580.8	3,621.7
	Southwestern Offshore	2,773.1	185.2	360.2	724.9	4,043.5	5,670.9	4,653.1	3,770.1
	Northern	12,877.3	51.5	1,659.4	5,950.9	20,539.1	39,055.1	34,860.8	30,950.5
	Southern	3,876.1	116.6	1,038.7	1,610.0	6,641.4	11,440.3	10,986.1	8,373.3

behavior of the liquefiabls shrinkage factor in all the gas processing complexes. In reference to the plant liquids recovery factor, the lower part of Figure 3.3, the La Venta GPC shows values of zero in February and March 2005, when it was out of operation for maintenance. The recovery of liquids then increased an average of 114.7 barrels per million cubic feet from May to December, which was due to the increased gas flow from the offshore regions.

3.3 Remaining Total Reserves

The remaining total reserves, or 3P, which correspond to the sum of the proved, probable and possible reserves, amounted to 46,417.5 million bar-

rels of oil equivalent as of January 1, 2006. Proved reserves accounted for 35.5 percent, probable, 34.0 percent and possible, 30.5 percent, as can be seen in Figure 3.4.

The distribution by fluids of the country's total reserves in the last four years can be seen in Table 3.1, where for the evaluation as of January 1, 2006, crude oil accounted for 71.3 percent of the total, dry gas, 19.3 percent, plant liquids add 7.5 percent and the condensate 1.9 percent.

Regionally, considering the oil equivalent of 2006, the Northern Region provides 44.3 percent, the Northeastern Offshore Region 32.7 percent, the Southern Region 14.3 percent and the Southwestern Offshore

Table 3.2 Classification of total reserves, or 3P, of crude oil and natural gas.

Year	Region	Crude Oil			Associated Bcf	Natural Gas			
		Heavy MMbbl	Light MMbbl	Superlight MMbbl		Non-associated			Total Bcf
						G-C* Bcf	Wet Gas Bcf	Dry Gas Bcf	
2003 Total		19,159.2	13,636.9	3,469.8	52,010.9	5,719.4	4,264.1	3,438.5	13,422.0
	Northeastern Offshore	15,184.7	115.2	0.0	6,919.5	0.0	0.0	0.0	0.0
	Southwestern Offshore	466.1	1,941.4	658.1	3,627.6	1,903.7	0.0	870.0	2,773.8
	Northern	3,426.3	7,901.9	1,972.7	32,659.2	0.0	3,981.1	2,106.2	6,087.4
	Southern	82.2	3,678.4	839.1	8,804.5	3,815.7	283.0	462.2	4,560.9
2004 Total		18,035.7	12,932.6	3,420.7	50,412.8	5,403.0	4,334.1	3,742.9	13,480.0
	Northeastern Offshore	13,929.6	110.6	0.0	6,437.4	0.0	0.0	0.0	0.0
	Southwestern Offshore	605.2	1,700.5	636.6	3,480.7	1,928.8	0.0	750.3	2,679.0
	Northern	3,427.8	7,816.5	1,951.2	32,365.6	0.0	4,089.2	2,518.9	6,608.1
	Southern	73.1	3,305.0	832.9	8,129.1	3,474.2	244.9	473.7	4,192.9
2005 Total		17,373.3	12,472.1	3,466.8	49,431.5	5,470.7	4,688.9	4,287.6	14,447.3
	Northeastern Offshore	13,113.6	87.3	0.0	6,036.5	0.0	0.0	57.8	57.8
	Southwestern Offshore	617.9	1,665.7	676.9	3,574.9	2,018.6	0.0	1,029.9	3,048.5
	Northern	3,368.1	7,767.0	1,992.3	32,373.3	0.0	4,482.0	2,728.0	7,210.0
	Southern	273.6	2,952.2	797.6	7,446.8	3,452.1	206.9	472.0	4,131.0
2006 Total		18,786.6	11,523.3	2,783.0	48,183.0	5,149.1	4,219.5	4,803.3	14,171.8
	Northeastern Offshore	13,487.5	78.9	0.0	6,130.7	0.0	0.0	57.8	57.8
	Southwestern Offshore	667.6	1,538.4	567.1	2,961.6	1,938.0	0.0	771.4	2,709.3
	Northern	4,326.4	7,040.3	1,510.6	31,726.6	97.4	3,990.3	3,240.9	7,328.5
	Southern	305.2	2,865.7	705.3	7,364.1	3,113.8	229.2	733.3	4,076.2

* G-C: Gas-Condensate Reservoirs

Region with 8.7 percent complements this volume, Table 3.1.

Total crude oil reserves as of January 1, 2006 amounted to 33,093.0 million barrels, with heavy oil accounting for 56.8 percent of the national total, light oil 34.8 percent and superlight 8.4 percent. The Northeastern Offshore Region provides 71.8 percent of the nation's total heavy oil, while the Northern Region furnishes 61.1 percent of the total light oil and 54.3 percent of the total superlight oil. Table 3.2 shows the classification of the total proved reserves of crude oil by density.

As of January 1, 2006, the total natural gas reserves amount to 62,354.8 billion cubic feet, with 62.6 percent concentrated in the Northern Region. The gas reserves to be delivered to processing plants are 55,080.8 billion cubic feet and the dry gas reserves are estimated at 46,715.6 billion cubic feet. This information and its historic evolution can be seen in Table 3.1.

The classification of total reserves of natural gas by association with oil in the reservoir is shown in Table 3.2, where the 3P reserves of associated gas represent 77.3 percent of the total, because most of the reservoirs in the country are oil reservoirs. The remaining 22.7 percent is non-associated gas reserves, with the Northern Region providing 51.7 percent, most of which is located in wet gas reservoirs; the Southern Region contains 28.8 percent, in mostly gas-conden-

sate reservoirs; the Southwestern Offshore Region has 19.1 percent, where the reserves are mainly located in the gas-condensate reservoirs, and the Northeastern Offshore Region with 0.4 percent in dry gas reservoirs completes this volume.

Figure 3.5 shows the historic evolution of the total oil equivalent reserves of the country in the last three years. The evaluation as of January 1, 2006 decreased 1.1 percent compared with the previous year. The most important element of changes is the production of 1,604.2 million barrels of oil equivalent in 2005, where the Northeastern Offshore Region produced 58.5 percent. Discoveries contributed 950.2 million barrels of oil equivalent, which replaces 59.2 percent of the production. The reduction due to delimitations with 128.7 million barrels of oil equivalent added to the discoveries means an addition of 821.5 million barrels of oil equivalent. The developments increased reserves by 690.9 million barrels of oil equivalent and the revisions reduced them by 404.7 million barrels of oil equivalent.

The reserve-production ratio, which is obtained by dividing the remaining reserve as of January 1, 2006 by the production in 2005, is 28.9 years for the total reserves; for the addition of proved plus probable reserves (2P) it is 20.1 years, and 10.3 years for proved reserves. This ratio does not consider a decrease in production, the incorporation of reserves in the future or variations in the hydrocarbon prices and in the operation and transport costs.

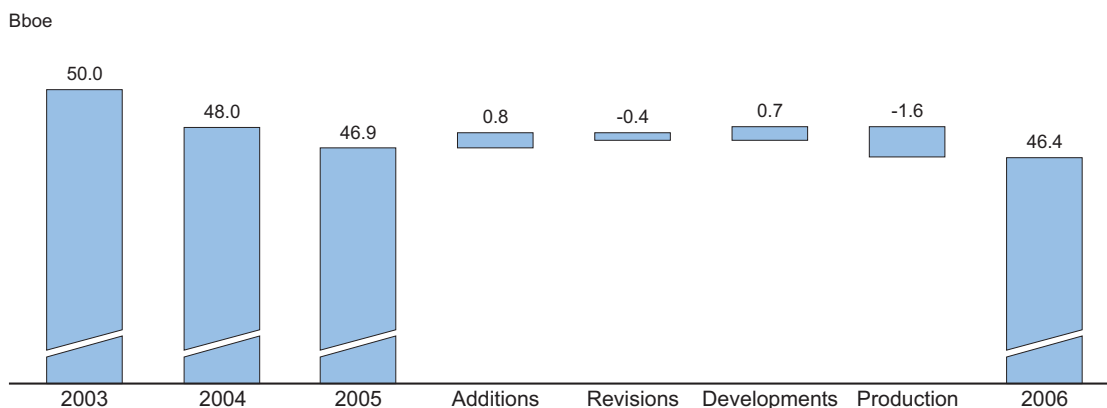


Figure 3.5 Historic evolution of Mexico's total oil equivalent reserves.

3.3.1 Remaining Proved Reserves

Mexico's proved hydrocarbon reserves are evaluated in accordance with the criteria and definitions of the Securities and Exchange Commission (SEC) of the United States, with the remaining reserves as of January 1, 2006 being reported as 16,469.6 million barrels of oil equivalent. The distribution by region and by fluid type is shown in Table 3.3, where it can be seen that in the year, crude oil accounted for 71.7 percent of the total proved reserves, dry gas 17.0 percent, while plant liquids and condensate reached 8.0 percent and 3.3 percent, respectively. Regionally, the Northeastern Offshore Region accounts for 49.8 percent of the total oil equivalent; the Southern Region reaches 29.7 percent, while the Northern Region provides 11.3 percent

and the Southwestern Offshore Region furnishes the remaining 9.2 percent.

As of January 1, 2006, the proved crude oil reserves totaled 11,813.8 million barrels, heavy oil being the dominant fluid with 64.0 percent of the national total, light oil with 30.0 percent and superlight oil with 6.0 percent. The Northeastern Offshore Region provides 93.4 percent of the total heavy oil; the Southern Region has 63.7 percent of the light oil and 73.8 percent of the superlight oil. Table 3.4 shows the classification of the proved reserves of crude oil by density.

The historic evolution of Mexico's proved natural gas reserves is shown in Table 3.3. These reserves totaled 19,956.9 billion cubic feet, as of January 1, 2006. Gas reserves to be delivered to plant totaled 17,794.0 billion

Table 3.3 Distribution by fluid and region of remaining proved reserves.

Year	Region	Remaining Hydrocarbon Reserves					Remaining Gas Reserves		
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003 Total		15,123.6	550.5	1,521.9	2,881.3	20,077.3	21,626.1	18,818.9	14,985.4
	Northeastern Offshore	9,354.8	319.3	304.9	526.3	10,505.3	4,853.1	3,482.3	2,737.1
	Southwestern Offshore	1,318.4	99.2	149.1	277.9	1,844.6	2,266.6	1,817.8	1,445.6
	Northern	886.5	19.3	101.1	621.3	1,628.2	3,822.4	3,467.1	3,231.4
	Southern	3,563.8	112.7	966.9	1,455.8	6,099.1	10,684.1	10,051.7	7,571.3
2004 Total		14,119.6	476.9	1,443.3	2,855.4	18,895.2	20,740.2	18,277.6	14,850.6
	Northeastern Offshore	8,594.4	250.6	315.9	528.7	9,689.7	4,683.9	3,525.0	2,749.7
	Southwestern Offshore	1,188.7	91.2	140.2	260.4	1,680.5	2,093.6	1,694.3	1,354.5
	Northern	959.4	22.4	101.3	685.5	1,768.6	4,157.4	3,807.5	3,565.3
	Southern	3,377.1	112.6	885.9	1,380.7	5,756.3	9,805.3	9,250.9	7,181.0
2005 Total		12,882.2	518.7	1,401.8	2,847.1	17,649.8	20,432.5	18,244.3	14,807.5
	Northeastern Offshore	7,678.8	304.0	315.2	511.1	8,809.1	4,347.7	3,379.5	2,658.3
	Southwestern Offshore	1,213.6	84.9	155.8	289.3	1,743.6	2,324.9	1,865.0	1,504.7
	Northern	1,048.5	24.6	117.0	803.8	1,994.0	4,880.6	4,484.3	4,180.5
	Southern	2,941.3	105.2	813.7	1,242.9	5,103.1	8,879.2	8,515.4	6,464.0
2006 Total		11,813.8	537.9	1,318.8	2,799.0	16,469.6	19,956.9	17,794.0	14,557.3
	Northeastern Offshore	7,106.2	341.2	289.1	473.0	8,209.4	4,190.4	3,118.2	2,459.9
	Southwestern Offshore	1,011.3	76.4	148.4	276.8	1,513.0	2,245.8	1,803.5	1,439.6
	Northern	888.1	21.1	106.5	848.4	1,864.0	4,964.4	4,657.8	4,412.4
	Southern	2,808.2	99.3	774.9	1,200.8	4,883.2	8,556.3	8,214.5	6,245.3

Table 3.4 Classification of proved reserves, or 1P, of crude oil and natural gas.

Year	Region	Crude Oil				Natural Gas			
		Heavy	Light	Superlight	Associated	Non-associated			Total
						G-C*	Wet Gas	Dry Gas	
MMbbl	MMbbl	MMbbl	Bcf	Bcf	Bcf	Bcf	Bcf		
2003 Total		9,809.3	4,462.9	851.4	15,869.6	2,780.0	1,833.5	1,143.0	5,756.5
	Northeastern Offshore	9,304.0	50.8	0.0	4,853.1	0.0	0.0	0.0	0.0
	Southwestern Offshore	180.1	1,021.6	116.8	1,711.4	447.2	0.0	107.9	555.1
	Northern	269.1	598.5	18.9	1,632.9	0.0	1,589.3	600.2	2,189.5
	Southern	56.1	2,791.9	715.7	7,672.3	2,332.8	244.1	434.9	3,011.8
2004 Total		9,086.5	4,215.2	817.9	14,931.0	2,663.9	1,598.8	1,546.3	5,809.1
	Northeastern Offshore	8,522.8	71.7	0.0	4,683.9	0.0	0.0	0.0	0.0
	Southwestern Offshore	209.0	863.0	116.6	1,521.8	444.8	0.0	127.0	571.8
	Northern	311.6	627.7	20.1	1,754.4	0.0	1,397.2	1,005.8	2,403.0
	Southern	43.1	2,652.8	681.2	6,970.9	2,219.2	201.7	413.5	2,834.4
2005 Total		8,198.3	3,839.3	844.6	14,028.8	2,673.5	1,708.0	2,022.3	6,403.7
	Northeastern Offshore	7,624.4	54.4	0.0	4,334.3	0.0	0.0	13.4	13.4
	Southwestern Offshore	216.2	818.0	179.4	1,384.9	734.2	0.0	205.9	940.0
	Northern	338.8	655.5	54.3	1,904.5	0.0	1,544.3	1,431.8	2,976.2
	Southern	18.9	2,311.4	610.9	6,405.1	1,939.3	163.7	371.1	2,474.1
2006 Total		7,557.4	3,550.4	706.0	13,274.2	2,191.3	1,657.9	2,833.5	6,682.7
	Northeastern Offshore	7,060.2	46.0	0.0	4,176.7	0.0	0.0	13.7	13.7
	Southwestern Offshore	113.8	718.5	179.0	1,442.9	598.7	0.0	204.1	802.9
	Northern	358.6	523.5	6.0	1,430.4	34.5	1,472.5	2,027.1	3,534.1
	Southern	24.8	2,262.4	521.0	6,224.2	1,558.0	185.4	588.7	2,332.1

* G-C: Gas-Condensate Reservoirs

cubic feet, with slightly less than half of this in the Southern Region. The proved dry gas reserve is 14,557.3 billion cubic feet, the Southern Region holds 42.9 percent and the Northern Region has 30.3 percent.

The classification of proved natural gas reserves by association with oil in the reservoir is shown in Table 3.4. For 2006, associated gas reserves account for 66.5 percent of the total and non-associated gas is 33.5

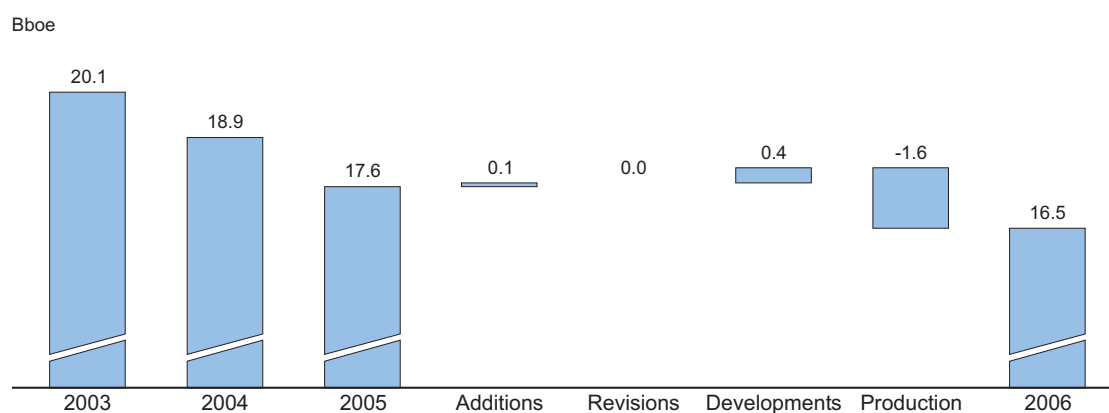


Figure 3.6 Historic behavior of Mexico's remaining proved oil equivalent reserves.

percent. The Southern and Northeastern Offshore regions provide 46.9 and 31.5 percent of the proved associated gas reserves; the greatest contribution of non-associated gas reserves lies in the Northern and Southern regions, with 52.9 percent and 34.9 percent, respectively. The Southern Region and the Southwestern Offshore Region have most their proved non-associated gas reserves in gas-condensate reservoirs, while in the Northern Region, more than half of these reserves are in dry gas reservoirs.

The historic behavior of proved oil equivalent reserves of the country in the last three years is shown in Figure 3.6, where as of January 1, 2006 there was a decrease of 6.7 percent. The additions and developments increased the proved reserves by 100.5 and 372.1 million barrels of oil equivalent, respectively. The production in 2005, 1,604.2 million barrels of oil equivalent and the revisions with 48.6 million barrels of oil equivalent explain the decreases in this category of reserves.

The classification by category of proved reserves as of January 1, 2006 is shown in Figure 3.7. The developed proved reserves account for 68.8 percent of the total and the remaining 31.2 percent is made up of undeveloped.

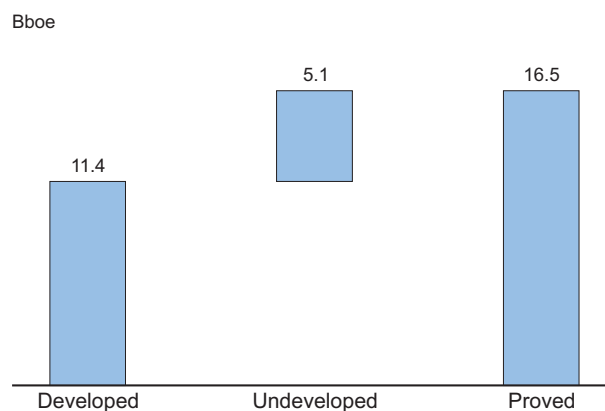


Figure 3.7 Classification by category of the remaining proved oil equivalent reserves.

In the international sphere, Mexico is ranked 14th in reference to the proved reserves of oil plus condensate plus plant liquids. In terms of dry gas, Mexico is in the 35th place. Table 3.5 shows the proved reserves of crude oil and dry gas of the most important producing countries.

3.3.1.1 Remaining Developed Proved Reserves

As of January 1, 2006, Mexico's developed proved reserves totaled 11,325.6 million barrels of oil equivalent.

Table 3.5 Proved crude oil and dry gas reserves of the most important producing countries.

Ranking	Country	Crude Oil ^a MMbbl	Ranking	Country	Dry Gas Bcf
1	Saudi Arabia	264,310	1	Russia	1,680,000
2	Canada	178,792	2	Iran	971,150
3	Iran	132,460	3	Qatar	910,520
4	Iraq	115,000	4	Saudi Arabia	241,340
5	Kuwait	101,500	5	United Arab Emirates	214,400
6	United Arab Emirates	97,800	6	United States of America	192,513
7	Venezuela	79,729	7	Nigeria	184,660
8	Russia	60,000	8	Algeria	160,505
9	Libya	39,126	9	Venezuela	151,395
10	Nigeria	35,876	10	Iraq	111,950
11	United States of America	21,371	11	Indonesia	97,786
12	China	18,250	12	Norway	84,260
13	Qatar	15,207	13	Malaysia	75,000
14	Mexico	13,671	14	Turkmenistan	71,000
15	Algeria	11,350	35	Mexico	14,557

Source: Mexico, Pemex Exploración y Producción. Other countries, Oil & Gas Journal, December 19, 2005

a. Includes condensates and liquids from natural gas

lent, which means a slight decrease of not even one percent compared with the previous year. The additions, developments and revisions add up to 1,584.1 million barrels of oil equivalent, which replaced 98.7 percent of the production of 1,604.2 million barrels of oil equivalent in 2005.

The distribution by region and by fluid type of the remaining developed proved reserves is shown in Table 3.6, where it can be seen that during the year, crude oil accounted for 75.6 percent, dry gas 15.1 percent, plant liquids 6.9 percent and condensate 2.4 percent. The Northeastern Offshore Region provides 54.0 percent of the oil equivalent reserves, the Southern Region has 29.5 percent and the Northern and Southwestern Offshore regions have 9.4 and 7.1 percent, respectively.

The developed proved natural gas reserves as of January 1, 2006 totaled 11,945.4 billion cubic feet, as can be seen in Table 3.6. The reserves of gas to be delivered to plant amount to 10,801.3 billion cubic feet, with the Southern Region providing almost half; while the dry gas reserve totals 8,888.2 billion cubic feet, with the Southern Region providing 44.3 percent of this total.

As of January 1, 2006, the developed proved reserves of crude oil totaled 8,565.1 million barrels. Heavy oil accounted for 67.1 percent of the national total, light oil 27.9 percent and superlight 5.0 percent. The Northeastern Offshore Region provides 96.6 percent of the total heavy oil; the Southern Region has 69.0 percent of the light oil and 86.0 percent of the superlight oil. The classification of developed proved crude oil reserves by density is shown in Table 3.7.

Table 3.6 Historic distribution by fluid and region of the remaining developed proved reserves.

Year	Region	Remaining Hydrocarbon Reserves					Remaining Gas Reserves		
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003 Total		10,549.0	300.3	875.7	1,648.2	13,373.2	12,328.6	10,775.9	8,572.4
	Northeastern Offshore	7,002.0	179.5	171.8	296.5	7,649.9	2,735.6	1,962.0	1,542.1
	Southwestern Offshore	675.4	41.3	62.1	107.2	886.0	945.4	712.4	557.3
	Northern	314.9	11.7	48.9	338.9	714.4	1,992.4	1,879.4	1,762.5
	Southern	2,556.6	67.7	593.0	905.7	4,123.0	6,655.2	6,222.1	4,710.4
2004 Total		9,436.7	240.8	795.3	1,556.2	12,029.0	11,248.2	9,987.5	8,093.7
	Northeastern Offshore	6,326.3	136.9	174.2	291.4	6,928.8	2,574.8	1,943.1	1,515.7
	Southwestern Offshore	521.6	27.4	41.9	70.4	661.3	612.5	467.7	366.1
	Northern	344.7	16.6	44.1	369.7	775.1	2,179.6	2,041.4	1,923.0
	Southern	2,244.1	59.9	535.2	824.6	3,663.8	5,881.3	5,535.3	4,288.9
2005 Total		8,735.4	254.8	754.9	1,600.6	11,345.7	11,265.8	10,188.3	8,324.8
	Northeastern Offshore	5,973.2	152.5	158.5	255.7	6,539.9	2,181.2	1,692.5	1,329.9
	Southwestern Offshore	488.5	30.2	55.1	88.3	662.1	767.8	586.6	459.4
	Northern	408.5	18.6	55.7	515.6	998.3	3,004.5	2,836.6	2,681.6
	Southern	1,865.2	53.5	485.7	741.0	3,145.4	5,312.3	5,072.6	3,853.9
2006 Total		8,565.1	273.8	777.6	1,709.0	11,325.6	11,945.4	10,801.3	8,888.2
	Northeastern Offshore	5,586.0	161.2	141.1	229.5	6,117.8	2,033.5	1,515.1	1,193.8
	Southwestern Offshore	547.4	42.3	82.0	131.0	802.6	1,121.3	882.3	681.1
	Northern	395.7	16.2	63.3	591.0	1,066.2	3,379.5	3,219.2	3,074.0
	Southern	2,036.1	54.1	491.3	757.4	3,338.9	5,411.1	5,184.7	3,939.3

The developed proved reserves of natural gas, classified by association with crude oil in the reservoir are also shown in Table 3.7. For this year, the developed proved associated gas reserve accounts for 60.2 percent, while the non-associated gas represents 39.8 percent. Most of the developed reserves of associated gas are in the Southern Region and the Northeastern Offshore Region, with 47.2 and 28.3 percent, respectively. In reference to the developed reserves of non-associated gas, the Northern Region has 55.4 percent of the national total, mostly in wet and dry gas reservoirs, 42.4 percent is located in the Southern Region, mostly in gas-condensate reservoirs and the Southwestern Offshore Region completes the amount with 2.2 percent in gas-condensate reservoirs.

3.3.1.2 Undeveloped Proved Reserves

As of January 1, 2006, the undeveloped proved reserves totaled 5,144.0 million barrels of oil equivalent, which means a decrease of 18.4 percent compared with the figure reported in the previous year. Discoveries incorporated 94.7 million barrels of oil equivalent, the delimitations, developments and revisions reduced this reserve by 1,254.7 million barrels of oil equivalent, mainly because of the reclassification of these reserves to the developed proved category.

Table 3.8 shows the historic distribution by fluid and region of the undeveloped proved reserves. This year, crude oil accounts for 63.2 percent, dry gas 21.2 percent, plant liquids 10.5 percent and the condensate

Table 3.7 Classification of developed proved crude oil and natural gas reserves.

Year	Region	Crude Oil			Associated Bcf	Natural Gas			
		Heavy MMbbl	Light MMbbl	Superlight MMbbl		G-C* Bcf	Non-associated		Total Bcf
							Wet Gas Bcf	Dry Gas Bcf	
2003 Total		7,154.2	2,891.1	503.7	8,315.7	2,046.6	1,282.4	683.8	4,012.9
	Northeastern Offshore	6,964.0	38.1	0.0	2,735.6	0.0	0.0	0.0	0.0
	Southwestern Offshore	0.0	659.3	16.1	945.4	0.0	0.0	0.0	0.0
	Northern	155.8	159.1	0.1	579.2	0.0	1,038.3	374.9	1,413.2
	Southern	34.5	2,034.6	487.5	4,055.5	2,046.6	244.1	308.9	2,599.7
2004 Total		6,476.6	2,463.4	496.7	7,275.3	1,956.6	1,192.7	823.5	3,972.9
	Northeastern Offshore	6,283.7	42.6	0.0	2,574.8	0.0	0.0	0.0	0.0
	Southwestern Offshore	0.0	511.3	10.4	612.5	0.0	0.0	0.0	0.0
	Northern	171.1	172.2	1.4	549.1	0.0	991.1	639.4	1,630.5
	Southern	21.8	1,737.4	484.9	3,539.0	1,956.6	201.7	184.1	2,342.3
2005 Total		6,158.1	2,122.8	454.6	6,817.9	1,721.7	1,310.1	1,416.1	4,447.9
	Northeastern Offshore	5,938.2	35.0	0.0	2,181.2	0.0	0.0	0.0	0.0
	Southwestern Offshore	0.0	474.9	13.5	767.8	0.0	0.0	0.0	0.0
	Northern	200.9	205.8	1.7	633.9	0.0	1,146.4	1,224.2	2,370.6
	Southern	18.9	1,407.0	439.3	3,235.0	1,721.7	163.7	191.9	2,077.3
2006 Total		5,746.8	2,390.4	427.9	7,190.0	1,603.3	1,260.7	1,891.3	4,755.4
	Northeastern Offshore	5,552.7	33.2	0.0	2,033.5	0.0	0.0	0.0	0.0
	Southwestern Offshore	0.0	488.1	59.3	1,013.9	107.4	0.0	0.0	107.4
	Northern	176.6	218.6	0.5	746.0	11.1	1,077.7	1,544.7	2,633.6
	Southern	17.5	1,650.4	368.2	3,396.6	1,484.8	183.0	346.6	2,014.4

* G-C: Gas-Condensate Reservoirs

Table 3.8 Historic distribution by fluid and region of undeveloped proved reserves.

Year	Region	Remaining Hydrocarbon Reserves				Remaining Gas Reserves			
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003 Total		4,574.6	250.3	646.2	1,233.0	6,704.1	9,297.5	8,043.0	6,413.0
	Northeastern Offshore	2,352.8	139.8	133.1	229.8	2,855.4	2,117.5	1,520.3	1,195.0
	Southwestern Offshore	643.0	57.9	87.0	170.8	958.7	1,321.2	1,105.4	888.3
	Northern	571.6	7.6	52.2	282.4	913.8	1,829.9	1,587.7	1,468.9
	Southern	1,007.2	45.0	373.9	550.1	1,976.1	4,028.9	3,829.6	2,860.9
2004 Total		4,682.9	236.1	648.0	1,299.2	6,866.2	9,492.0	8,290.1	6,756.8
	Northeastern Offshore	2,268.2	113.7	141.8	237.3	2,761.0	2,109.1	1,581.9	1,234.0
	Southwestern Offshore	667.1	63.8	98.3	190.1	1,019.2	1,481.1	1,226.6	988.5
	Northern	614.7	5.9	57.2	315.8	993.5	1,977.8	1,766.1	1,642.3
	Southern	1,133.1	52.7	350.7	556.1	2,092.5	3,924.0	3,715.6	2,892.1
2005 Total		4,146.8	263.9	646.9	1,246.5	6,304.1	9,166.7	8,056.0	6,482.7
	Northeastern Offshore	1,705.5	151.5	156.7	255.4	2,269.2	2,166.6	1,687.0	1,328.4
	Southwestern Offshore	725.1	54.7	100.8	201.0	1,081.5	1,557.1	1,278.5	1,045.3
	Northern	640.1	6.0	61.4	288.2	995.6	1,876.1	1,647.7	1,498.9
	Southern	1,076.1	51.7	328.1	501.9	1,957.8	3,566.9	3,442.8	2,610.1
2006 Total		3,248.7	264.1	541.2	1,090.0	5,144.0	8,011.5	6,992.7	5,669.0
	Northeastern Offshore	1,520.2	179.9	148.0	243.4	2,091.6	2,156.9	1,603.1	1,266.1
	Southwestern Offshore	463.9	34.1	66.5	145.8	710.3	1,124.5	921.1	758.5
	Northern	492.4	4.9	43.2	257.3	797.8	1,584.9	1,438.6	1,338.4
	Southern	772.2	45.2	283.6	443.4	1,544.3	3,145.2	3,029.8	2,306.1

makes up the remaining 5.1 percent. Regionally for oil equivalent in 2006, the Northeastern Offshore Region provides 40.7 percent, the Southern Region has 30.0 percent and the Northern and Southwestern Offshore regions have 15.5 and 13.8 percent, respectively.

Undeveloped proved natural gas reserves, as of January 1, 2006, amounted to 8,011.5 billion cubic feet, as can be seen in Table 3.8. The gas to be delivered to plant is 6,992.7 billion cubic feet; the Southern Region accounts for 43.3 percent of this total. The dry gas reserve totals 5,669.0 billion cubic feet, of which 40.7 percent is located in the Southern Region.

The undeveloped proved crude oil reserves, as of January 1, 2006, amount to 3,248.7 million barrels, with heavy oil representing 55.7 percent of the total,

light oil with 35.7 percent and the superlight with 8.6 percent. The Northeastern Offshore Region provides 83.3 percent of the total heavy oil; the Southern Region has 52.8 percent of the light oil and 55.0 percent of the superlight oil. Table 3.9 shows the classification by density of the undeveloped proved crude oil reserves.

The classification of the undeveloped proved reserves of natural gas by association with crude oil in the reservoir is also shown in Table 3.9. As of January 1, 2006, undeveloped proved reserves of associated gas accounted 75.9 percent, while the non-associated gas was 24.1 percent. The Southern Region contributes 46.5 percent of the undeveloped associated gas reserves. The Northern Region has 46.7 percent of the non-associated gas reserves, mostly in wet gas and

Table 3.9 Classification of undeveloped proved crude oil and natural gas reserves.

Year	Region	Crude Oil			Natural Gas				
		Heavy	Light	Superlight	Associated	Non-associated			Total
						G-C*	Wet Gas	Dry Gas	
MMbbl	MMbbl	MMbbl	Bcf	Bcf	Bcf	Bcf	Bcf		
2003 Total		2,655.1	1,571.8	347.7	7,554.0	733.4	551.0	459.1	1,743.6
	Northeastern Offshore	2,340.0	12.8	0.0	2,117.5	0.0	0.0	0.0	0.0
	Southwestern Offshore	180.1	362.3	100.6	766.1	447.2	0.0	107.9	555.1
	Northern	113.3	439.4	18.9	1,053.6	0.0	551.0	225.3	776.3
	Southern	21.7	757.3	228.2	3,616.8	286.2	0.0	126.0	412.1
2004 Total		2,610.0	1,751.7	321.2	7,655.7	707.3	406.1	722.8	1,836.3
	Northeastern Offshore	2,239.1	29.1	0.0	2,109.1	0.0	0.0	0.0	0.0
	Southwestern Offshore	209.0	351.7	106.3	909.3	444.8	0.0	127.0	571.8
	Northern	140.5	455.5	18.7	1,205.4	0.0	406.1	366.4	772.5
	Southern	21.3	915.5	196.3	3,431.9	262.6	0.0	229.5	492.0
2005 Total		2,040.2	1,716.5	390.1	7,210.9	951.8	397.9	606.2	1,955.8
	Northeastern Offshore	1,686.2	19.4	0.0	2,153.1	0.0	0.0	13.4	13.4
	Southwestern Offshore	216.2	343.0	165.8	617.1	734.2	0.0	205.9	940.0
	Northern	137.8	449.7	52.6	1,270.5	0.0	397.9	207.7	605.6
	Southern	0.0	904.4	171.7	3,170.1	217.6	0.0	179.2	396.8
2006 Total		1,810.6	1,160.1	278.1	6,084.2	588.0	397.2	942.2	1,927.3
	Northeastern Offshore	1,507.4	12.8	0.0	2,143.2	0.0	0.0	13.7	13.7
	Southwestern Offshore	113.8	230.4	119.7	429.0	491.4	0.0	204.1	695.5
	Northern	182.0	304.9	5.5	684.4	23.4	394.8	482.4	900.5
	Southern	7.3	612.0	152.8	2,827.5	73.2	2.4	242.1	317.7

* G-C: Gas-Condensate Reservoirs

dry gas reservoirs; the Southwestern Offshore Region has 36.1 percent in gas-condensate and dry gas reservoirs; the Southern Region has 16.5 percent, which is largely in dry gas reservoirs, and the Northeastern Offshore Region completes the figure with 0.7 percent in dry gas reservoirs.

3.3.2. Probable Reserves

The probable reserves as of January 1, 2006 total 15,788.5 million barrels of oil equivalent. The distribution by region and fluid type is shown in Table 3.10. For this year, 73.8 percent is oil, 18.6 percent is dry gas, 6.6 percent is plant liquids and the remaining 1.0 percent is condensate. In terms of oil equivalent, the

Northern Region accounts for 59.1 percent, the Northeastern Offshore Region 28.2 percent, the Southern Region 6.4 percent and the Southwestern Offshore Region 6.3 percent.

The probable natural gas reserves, as of January 1, 2006, amounted to 20,086.5 billion cubic feet, as shown in Table 3.10. The probable gas reserves to be delivered to plant are 17,730.7 billion cubic feet, of which 79.2 percent is concentrated in the Northern Region. The dry gas reserve totals 15,246.0 billion cubic feet, of which 80.9 percent is held in the Northern Region.

The classification by density of the probable crude oil reserves is shown in Table 3.11. As of January 1, 2006,

Table 3.10 Historic distribution by fluid and region of probable reserves.

Year	Region	Remaining Hydrocarbon Reserves					Remaining Gas Reserves		
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003	Total	12,531.1	173.7	1,018.2	3,241.9	16,965.0	22,070.9	19,125.2	16,859.9
	Northeastern Offshore	4,495.8	93.5	101.7	175.5	4,866.5	1,533.9	1,161.5	913.0
	Southwestern Offshore	856.6	62.9	94.8	216.7	1,230.9	1,604.3	1,363.4	1,127.0
	Northern	6,449.7	12.2	704.2	2,658.9	9,825.0	17,482.4	15,335.4	13,827.9
	Southern	729.0	5.1	117.6	190.7	1,042.5	1,450.2	1,264.9	992.0
2004	Total	11,814.1	157.9	959.4	3,073.7	16,005.1	20,474.0	18,148.8	15,986.0
	Northeastern Offshore	4,122.6	65.8	89.4	149.7	4,427.5	1,279.4	997.8	778.3
	Southwestern Offshore	812.4	63.1	96.8	219.9	1,192.2	1,607.8	1,378.2	1,143.5
	Northern	6,300.4	18.4	643.3	2,488.0	9,450.2	16,091.9	14,372.9	12,940.1
	Southern	578.7	10.6	129.8	216.1	935.1	1,494.8	1,399.9	1,124.1
2005	Total	11,621.2	168.9	980.2	3,065.8	15,836.1	20,703.4	18,113.2	15,945.0
	Northeastern Offshore	4,004.6	84.1	90.3	146.0	4,324.9	1,212.2	966.1	759.6
	Southwestern Offshore	787.3	56.8	104.6	242.8	1,191.6	1,760.2	1,504.4	1,262.8
	Northern	6,223.2	17.5	640.8	2,433.0	9,314.4	16,096.9	14,046.9	12,654.1
	Southern	606.1	10.5	144.6	243.9	1,005.2	1,634.1	1,595.7	1,268.6
2006	Total	11,644.1	166.6	1,046.5	2,931.4	15,788.5	20,086.5	17,730.7	15,246.0
	Northeastern Offshore	4,112.4	105.7	86.8	141.6	4,446.5	1,230.6	934.1	736.5
	Southwestern Offshore	740.7	33.7	65.0	158.5	997.8	1,167.1	983.6	824.2
	Northern	6,213.9	12.7	727.7	2,370.4	9,324.7	15,849.1	14,042.2	12,328.1
	Southern	577.1	14.5	167.1	260.9	1,019.6	1,839.8	1,770.8	1,357.2

these reserves amounted to 11,644.1 million barrels, with heavy oil accounting for 58.2 percent of the national total, light oil 33.4 percent, and superlight 8.4 percent. The Northeastern Offshore Region provides 60.7 percent of the heavy oil; the Northern Region has 78.8 and 75.8 percent of the light oil and superlight oil, respectively.

In 2006, the probable reserves of associated gas represent 83.5 percent of the total and the reserves of non-associated gas account for the remaining 16.5 percent. The Northern Region holds 84.9 percent of the probable associated gas reserves. In reference to the reserves of non-associated gas, 48.7 percent of such are located in the Northern Region, mostly from wet gas reservoirs; 32.7 percent in the Southern Region and 18.5 percent in the South-

western Offshore Region. The most important sources in these two regions are gas-condensate reservoirs. Table 3.11 shows the probable reserves of natural gas classified as associated and non-associated with oil.

The behavior of Mexico's probable oil equivalent reserves over the last three years is shown in Figure 3.8. During the year, there was a decrease of 47.5 million barrels of oil equivalent, which is 0.3 percent compared with the previous year. The additions contributed 127.6 million barrels of oil equivalent, however, with the revision of existing fields there was a decrease of 350.2 million barrels of oil equivalent, and the developments increased the figure by 175.1 million barrels of oil equivalent.

Table 3.11 Classification of probable crude oil and natural gas reserves.

Year	Region	Crude Oil				Natural Gas			
		Heavy	Light	Superlight	Associated	Non-associated			Total
						G-C*	Wet Gas	Dry Gas	
MMbbl	MMbbl	MMbbl	Bcf	Bcf	Bcf	Bcf	Bcf		
2003 Total		6,280.4	4,899.1	1,351.6	19,246.5	1,127.9	903.4	793.0	2,824.3
	Northeastern Offshore	4,467.5	28.3	0.0	1,533.9	0.0	0.0	0.0	0.0
	Southwestern Offshore	135.9	566.9	153.7	985.1	340.2	0.0	279.0	619.2
	Northern	1,653.6	3,685.2	1,111.0	16,091.3	0.0	899.1	492.0	1,391.1
	Southern	23.4	618.7	87.0	636.3	787.7	4.2	22.0	813.9
2004 Total		5,875.1	4,621.6	1,317.4	17,338.7	1,028.2	1,160.4	946.6	3,135.3
	Northeastern Offshore	4,116.6	6.0	0.0	1,279.4	0.0	0.0	0.0	0.0
	Southwestern Offshore	156.0	553.2	103.3	941.6	370.8	0.0	295.5	666.3
	Northern	1,580.6	3,607.7	1,112.1	14,330.8	0.0	1,156.0	605.2	1,761.2
	Southern	21.9	454.7	102.0	787.0	657.4	4.4	46.0	707.8
2005 Total		5,725.1	4,477.1	1,419.0	17,076.4	1,372.1	1,309.5	945.4	3,627.0
	Northeastern Offshore	4,004.6	0.0	0.0	1,210.0	0.0	0.0	2.3	2.3
	Southwestern Offshore	156.9	479.6	150.8	910.8	458.9	0.0	390.4	849.3
	Northern	1,550.1	3,543.5	1,129.6	14,326.3	0.0	1,305.1	465.6	1,770.7
	Southern	13.5	454.0	138.6	629.3	913.2	4.4	87.2	1,004.7
2006 Total		6,774.9	3,891.7	977.5	16,770.6	1,319.6	1,149.4	847.0	3,316.0
	Northeastern Offshore	4,112.4	0.0	0.0	1,228.3	0.0	0.0	2.2	2.2
	Southwestern Offshore	220.2	416.3	104.1	552.5	330.9	0.0	283.7	614.6
	Northern	2,405.3	3,068.0	740.6	14,234.9	35.0	1,140.2	439.1	1,614.3
	Southern	37.0	407.4	132.8	754.9	953.7	9.2	122.0	1,084.9

* G-C: Gas-Condensate Reservoirs

3.3.3. Possible Reserves

As of January 1, 2006, Mexico's possible oil equivalent reserves amounted to 14,159.4 million barrels. The distribution by region and fluid type is shown in Table

3.12. Crude oil accounts for 68.0 percent, 23.0 percent is dry gas, 7.9 percent is plant liquids and 1.1 percent is condensate. The Northern Region accounts for 66.1 percent of the total of these reserves, the Northeastern Offshore Region has 17.9 percent, the

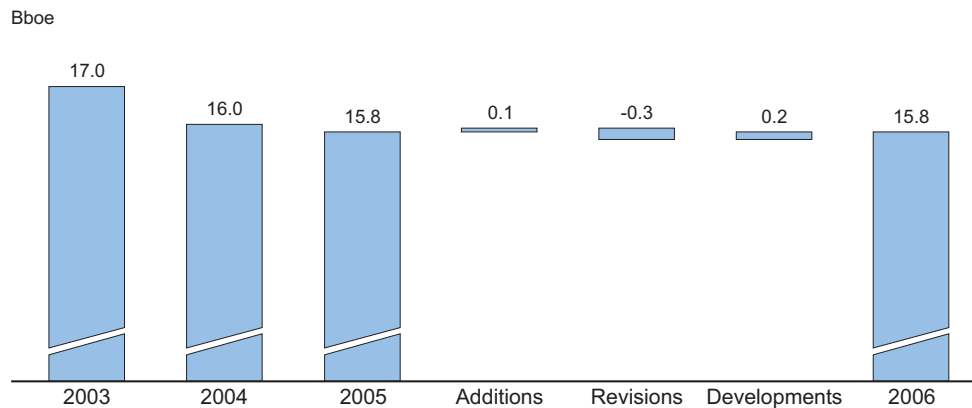


Figure 3.8 Historic behavior of Mexico's probable oil equivalent reserves.

Table 3.12 Historic distribution by fluid and region of possible reserves.

Year	Region	Remaining Hydrocarbon Reserves					Remaining Gas Reserves		
		Crude Oil MMbbl	Condensate MMbbl	Plant Liquids MMbbl	Dry Gas Equivalent MMboe	Total MMboe	Natural Gas Bcf	Gas to be Delivered to Plant Bcf	Dry Gas Bcf
2003 Total		8,611.2	159.9	959.6	3,259.2	12,990.0	21,735.9	19,097.4	16,951.1
	Northeastern Offshore	1,449.2	35.5	33.2	57.3	1,575.2	532.6	379.0	298.0
	Southwestern Offshore	890.6	101.3	152.3	355.6	1,499.8	2,530.5	2,229.7	1,849.4
	Northern	5,964.5	15.6	671.4	2,684.9	9,336.5	17,441.7	15,407.9	13,964.3
	Southern	306.8	7.5	102.8	161.4	578.5	1,231.1	1,080.8	839.4
2004 Total		8,455.2	156.9	1,034.7	3,493.9	13,140.7	22,678.7	20,471.9	18,171.7
	Northeastern Offshore	1,323.1	25.2	31.8	53.3	1,433.4	474.1	355.3	277.2
	Southwestern Offshore	941.2	106.0	163.5	338.5	1,549.1	2,458.4	2,156.4	1,760.6
	Northern	5,935.7	22.0	752.8	2,955.6	9,666.1	18,724.3	17,020.4	15,372.0
	Southern	255.1	3.9	86.6	146.5	492.1	1,021.9	939.8	762.0
2005 Total		8,808.9	147.7	1,030.6	3,441.1	13,428.2	22,742.8	20,169.1	17,896.9
	Northeastern Offshore	1,517.6	32.6	34.2	63.3	1,647.6	534.2	407.3	329.0
	Southwestern Offshore	959.6	87.6	162.5	343.7	1,553.4	2,538.3	2,163.3	1,787.6
	Northern	5,855.7	23.3	740.8	2,877.8	9,497.7	18,605.8	16,581.9	14,967.4
	Southern	476.0	4.2	93.1	156.3	729.6	1,064.5	1,016.6	812.9
2006 Total		9,635.0	158.5	1,114.1	3,251.8	14,159.4	22,311.4	19,556.1	16,912.3
	Northeastern Offshore	2,347.8	62.8	45.3	81.8	2,537.7	767.5	528.5	425.3
	Southwestern Offshore	1,021.1	75.1	146.8	289.6	1,532.7	2,258.0	1,866.0	1,506.3
	Northern	5,775.3	17.7	825.2	2,732.2	9,350.4	18,241.6	16,160.8	14,210.0
	Southern	490.8	2.9	96.8	148.2	738.7	1,044.2	1,000.8	770.8

Southwestern Offshore Region has 10.8 percent and the Southern Region has 5.2 percent.

As of January 1, 2006, possible natural gas reserves amounted to 22,311.4 billion cubic feet, according to Table 3.12. The gas to be delivered to plant is 19,556.1 billion cubic feet, most of which, 82.6 percent, is located in the Northern Region. The possible dry gas reserves amount to 16,912.3 million cubic feet, with 84.0 percent in the Northern Region where Chicontepec fields explain the hydrocarbon volume.

In 2006, the possible crude oil reserves amount to 9,635.0 million barrels, which are classified by specific gravity as shown in Table 3.13; heavy oil accounts for 46.2 percent of this total, light oil 42.4 percent and superlight oil 11.4 percent. The Northeastern Offshore

Region has 52.0 percent of the possible heavy oil reserves. The Northern Region has 84.5 percent of the possible light oil reserves, and 69.5 percent of the superlight reserves.

The classification of natural gas reserves by association with crude oil in the reservoir is shown in Table 3.13. The possible reserves of associated gas in 2006 contribute 81.3 percent of the total, while the non-associated gas is 18.7 percent. The Northern Region accounts for 88.6 percent of the possible associated gas reserves. The regional distribution of the possible non-associated gas reserves shows that the Northern Region has 52.2 percent, coming mostly from wet gas reservoirs; the Southwestern Offshore Region has 31.0 percent and the Southern Region has 15.8 percent. In both regions, the gas-condensate reservoirs contrib-

Table 3.13 Classification of possible crude oil and natural gas reserves.

Year	Region	Crude Oil				Natural Gas			
		Heavy	Light	Superlight	Associated	Non-associated			Total
						G-C*	Wet Gas	Dry Gas	
MMbbl	MMbbl	MMbbl	Bcf	Bcf	Bcf	Bcf	Bcf		
2003 Total		3,069.5	4,274.9	1,266.9	16,894.7	1,811.5	1,527.3	1,502.5	4,841.2
	Northeastern Offshore	1,413.1	36.1	0.0	532.6	0.0	0.0	0.0	0.0
	Southwestern Offshore	150.1	352.9	387.6	931.1	1,116.3	0.0	483.1	1,599.4
	Northern	1,503.6	3,618.1	842.8	14,935.0	0.0	1,492.7	1,014.0	2,506.7
	Southern	2.7	267.7	36.4	496.0	695.2	34.6	5.4	735.1
2004 Total		3,074.1	4,095.8	1,285.3	18,143.1	1,710.8	1,574.8	1,250.0	4,535.6
	Northeastern Offshore	1,290.2	32.9	0.0	474.1	0.0	0.0	0.0	0.0
	Southwestern Offshore	240.2	284.3	416.7	1,017.4	1,113.2	0.0	327.8	1,441.0
	Northern	1,535.6	3,581.2	818.9	16,280.4	0.0	1,536.0	908.0	2,443.9
	Southern	8.1	197.4	49.7	371.2	597.6	38.8	14.2	650.7
2005 Total		3,449.9	4,155.8	1,203.2	18,326.3	1,425.1	1,671.4	1,319.9	4,416.5
	Northeastern Offshore	1,484.7	32.9	0.0	492.2	0.0	0.0	42.0	42.0
	Southwestern Offshore	244.8	368.2	346.7	1,279.2	825.5	0.0	433.6	1,259.1
	Northern	1,479.3	3,568.0	808.4	16,142.6	0.0	1,632.6	830.5	2,463.1
	Southern	241.2	186.7	48.1	412.4	599.6	38.8	13.7	652.2
2006 Total		4,454.3	4,081.1	1,099.5	18,138.2	1,638.3	1,412.2	1,122.7	4,173.2
	Northeastern Offshore	2,315.0	32.9	0.0	725.6	0.0	0.0	41.9	41.9
	Southwestern Offshore	333.6	403.6	284.0	966.1	1,008.3	0.0	283.6	1,291.9
	Northern	1,562.4	3,448.8	764.1	16,061.4	27.9	1,377.6	774.7	2,180.2
	Southern	243.4	195.9	51.5	385.0	602.1	34.6	22.5	659.2

* G-C: Gas-Condensate Reservoirs

ute most of these reserves. The Northeastern Offshore Region has the remaining 1.0 percent.

The evolution of Mexico’s possible oil equivalent reserves over the last three years is shown in Figure 3.9. As of January 1, 2006, there is an increase of 731.2

million barrels of oil equivalent compared with the previous year, which is 5.4 percent. The additions item contributed 593.4 million barrels of oil equivalent, developments added 143.7 million barrels of oil equivalent and the revisions reduced these reserves by 5.9 million barrels of oil equivalent.

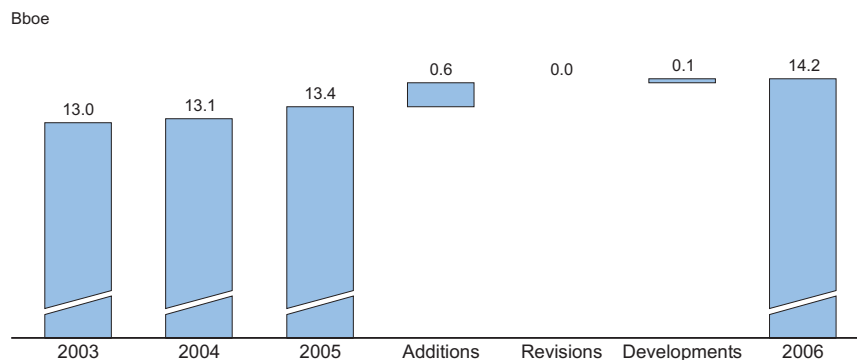


Figure 3.9 Historic behavior of Mexico's possible oil equivalent reserves.