

BRAZILIAN PETROLEUM CORP

Form 20-F

June 19, 2003

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

ANNUAL REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934
for the fiscal year ended December 31, 2002

Commission File Number 1-15106

PETRÓLEO BRASILEIRO S.A. PETROBRAS

(Exact name of registrant as specified in its charter)

Brazilian Petroleum Corporation PETROBRAS
(Translation of registrant's name into English)

The Federative Republic of Brazil
(Jurisdiction of incorporation or organization)

Avenida República do Chile, 65
20035-900 Rio de Janeiro RJ
Brazil
(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class:	Name of each exchange on which registered:
Common Shares, without par value* American Depositary Shares (as evidenced by American Depositary Receipts), each representing 1 Common Share	New York Stock Exchange
Preferred Shares, without par value* American Depositary Shares (as evidenced by American Depositary Receipts), each representing 1 Preferred Share	New York Stock Exchange

*Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

**Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock
as of the close of the period covered by this Annual Report:**

At December 31, 2002, there were outstanding:
634,168,418 Common Shares, without par value
451,935,669 Preferred Shares, without par value

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark which financial statement item the registrant has elected to follow.

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FORWARD-LOOKING STATEMENTS

Many statements made in this annual report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are not based on historical facts and are not assurances of future results. Many of the forward-looking statements contained in this annual report may be identified by the use of forward-looking words, such as believe, expect, anticipate, should, planned, estimate and potential, among others. We have made forward-looking statements to address, among other things, our:

regional marketing and expansion strategy;

drilling and other exploration activities;

import and export activities;

projected and targeted capital expenditures and other costs, commitments and revenues;

liquidity; and

development of additional revenue sources.

Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These factors include:

our ability to obtain financing;

general economic and business conditions, including crude oil and other commodity prices, refining margins and prevailing exchange rates;

competition;

technical difficulties in the operation of our equipment and the provision of our services;

changes in, or failure to comply with, governmental regulations;

receipt of governmental approvals and licenses;

business abilities and judgment of personnel;

availability of qualified personnel;

international and Brazilian political, economic and social developments;

military operations, terrorists acts, wars or embargoes;

the cost and availability of adequate insurance coverage; and

other factors discussed below under Risk Factors.

All forward-looking statements are expressly qualified in their entirety by this cautionary statement, and you should not place reliance on any forward-looking statement contained in this annual report.

The crude oil and natural gas reserve data presented or described in this annual report are only estimates and our actual production, revenues and expenditures with respect to our reserves may materially differ from these estimates.

PRESENTATION OF FINANCIAL INFORMATION

In this annual report, references to Real, Reais or R\$ are to Brazilian Reais and references to U.S. dollars or U.S.\$ are to United States dollars.

The audited consolidated financial statements of Petrobras and our consolidated subsidiaries as of December 31, 2002 and 2001, and for each of the three years in the period ended December 31, 2002, and the accompanying notes, contained in this annual report have been presented in U.S. dollars and prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). See Item 5 Operating and Financial Review and Prospects and Note 2(a) to our audited consolidated financial statements. We publish financial statements in Brazil in Reais in accordance with the accounting principles required by Brazilian corporate law and the regulations promulgated by the *Comissão de Valores Mobiliários* (Brazilian Securities Commission, or the CVM) (Brazilian GAAP), which differs in significant respects from U.S. GAAP.

PricewaterhouseCoopers Auditores Independentes has audited our financial statements as of and for the years ending December 31, 2002, 2001, 2000, 1999 and 1998. We are required by Brazilian Corporate Law to change auditors every five years and to solicit public bids for selecting auditors. Beginning in June 2003 and through 2005, Ernst & Young Auditores Independentes S/C will serve as our independent auditors.

As described more fully in Note 2(a) to our audited consolidated financial statements, the U.S. dollar amounts as of the dates and for the periods presented in the audited consolidated financial statements have been remeasured or translated from the Real amounts in accordance with the criteria set forth in Statement of Financial Accounting Standards No. 52 of the U.S. Financial Accounting Standards Board, or SFAS 52. Accordingly, U.S. dollar amounts presented in this annual report that were derived from the audited consolidated financial statements as of dates or for periods ending subsequent to December 31, 1997 have been translated from Reais at the period-end exchange rate for balance sheet items or the average exchange rate prevailing during the period for income statement and cash flow items.

Unless the context otherwise indicates,

historical data contained in this annual report that were not derived from the consolidated financial statements have been translated from Reais on a similar basis;

forward-looking amounts, including estimated future capital expenditures, have been projected on a constant basis and have been translated from Reais in 2003 at an estimated average exchange rate of R\$3.43 to U.S.\$1.00, and future calculations involving an assumed price of crude oil have been calculated using a Brent crude oil price of U.S.\$24.98, unless otherwise stated; and

estimated future capital expenditures are based on the most recently budgeted amounts, which may not have been adjusted to reflect all factors that could affect such amounts. In particular, as permitted under Brazilian GAAP, our planned future contributions to investments funded

through project finance are not included in our estimated future capital expenditures and are, instead, presented separately. Past contributions to investments funded through project finance are included as capital expenditures.

The December 31, 2002 exchange rate represented a 52.3% depreciation of the Real against the U.S. dollar since December 31, 2001, and the December 31, 2001 exchange rate represented an 18.7% depreciation of the Real against the U.S. dollar since December 31, 2000. The use of a different Real/U.S. dollar exchange rate would substantially change the remeasured amounts.

Certain figures included in this annual report have been subject to rounding adjustments; accordingly, figures shown as totals in certain tables may not be an exact arithmetic aggregation of the figures that precede them.

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Selected Financial Data

The following table sets forth our selected consolidated financial data, presented in U.S. dollars and prepared in accordance with U.S. GAAP. The data for each of the five years in the period ended December 31, 2002 have been derived from our audited consolidated financial statements, which were audited by PricewaterhouseCoopers Auditores Independentes. The information below should be read in conjunction with, and is qualified in its entirety by reference to, the audited consolidated financial statements and the accompanying notes and Item 5 Operating and Financial Review and Prospects.

BALANCE SHEET DATA

As of December 31,

	2002	2001	2000	1999	1998
(in millions of U.S. dollars)					
Assets					
Current assets:					
Cash and cash equivalents	\$ 3,301	\$ 7,360	\$ 5,826	\$ 3,015	\$ 813
Accounts receivable, net	2,267	2,759	2,211	1,575	1,464
Inventories	2,540	2,399	3,087	2,270	2,833
Other current assets	2,089	1,808	1,402	1,307	1,141
Total current assets	10,197	14,326	12,526	8,167	6,251
Property, plant and equipment, net	18,224	19,179	19,237	18,426	21,810
Investments in non-consolidated companies and other investments	334	499	530	438	373
Other assets:					
Petroleum and Alcohol Account Receivable from Brazilian Government	182	81	1,509	1,352	3,340
Government securities	176	665	3,542	3,573	4,776
Unrecognized pension obligation	61	187	333	486	899
Others	2,844	1,927	1,459	1,291	1,505
Total other assets	3,263	2,860	6,843	6,702	10,520
Total assets	\$32,018	\$36,864	\$39,136	\$33,733	\$38,954
Liabilities and stockholders equity					
Current liabilities:					
Trade accounts payable	\$ 1,702	\$ 1,783	\$ 2,011	\$ 1,314	\$ 1,294
Short-term debt	671	1,101	3,128	4,629	4,221
Current portion of long-term debt	727	940	952	1,136	733
Other current liabilities	3,845	4,220	3,549	2,732	1,943
Total current liabilities	6,945	8,044	9,640	9,811	8,191
Long-term liabilities:					
Employees post retirement benefits	2,423	3,380	4,319	5,163	7,666
Project financings	3,800	3,153	2,056	681	702
Long-term debt	6,987	5,908	4,833	4,778	4,883
Capital lease obligations	1,907	1,930	1,370	1,100	801
Other liabilities	791	1,123	2,060	1,241	1,069
Total long-term liabilities	15,908	15,494	14,638	12,963	15,121
Minority interest	(136)	79	153	237	351
Stockholders equity					
Shares authorized, issued and outstanding:					
Preferred stock 451,935,669	2,459	1,882	1,882	1,882	1,882
Common stock 634,168,418	3,761	2,952	2,952	2,952	2,952
Reserves and other	3,081	8,413	9,871	5,888	10,457
Total stockholders equity	9,301	13,247	14,705	10,722	15,291

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Total liabilities and stockholders' equity	\$32,018	\$36,864	\$39,136	\$33,733	\$38,954
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INCOME STATEMENT DATA

For the Year Ended December 31,

	2002	2001	2000	1999	1998
(in millions of U.S. Dollars, except for share and per share data)					
Sales of products and services	\$ 32,987	\$ 34,145	\$ 35,496	\$ 23,467	\$ 25,965
Value-added tax on sales and services, freight for the uniformity of price (FUP/FUPA), specific parcel price (PPE) and CIDE	(10,375)	(9,596)	(8,541)	(7,109)	(10,554)
Net operating revenues	22,612	24,549	26,955	16,358	15,411
Cost of sales ⁽¹⁾	11,506	12,807	13,449	8,210	9,867
Depreciation, depletion and amortization	1,930	1,729	2,022	2,262	3,408
Other operating expense ⁽²⁾	2,398	2,432	2,079	1,685	2,090
Total costs and expenses	15,834	16,968	17,550	12,157	15,365
Other non-operating income (expense), net ⁽³⁾	(3,546)	(2,789)	(1,602)	(3,255)	(235)
Income (loss) before income taxes and minority interests	3,232	4,792	7,803	946	(189)
Income tax (expense) benefit:					
Current	(1,269)	(1,196)	(1,574)	(65)	264
Deferred	116	(193)	(949)	(184)	338
Total income tax (expense) benefit	(1,153)	(1,389)	(2,523)	(249)	602
Minority interests in (income) loss of consolidated subsidiaries	232	88	62	30	(35)
Net income	\$ 2,311	\$ 3,491	\$ 5,342	\$ 727	\$ 378
Weighted average number of shares outstanding: ⁽⁴⁾					
Common/ADS	634,168,418	634,168,418	634,168,418	634,168,418	634,168,418
Preferred/ADS	451,935,669	451,935,669	451,935,669	451,935,669	451,935,669
Basic and diluted earnings (loss) per share:					
Common/ADS	\$ 2.13	\$ 3.21	\$ 4.92	\$ 0.67	\$ 0.24
Preferred/ADS	2.13	3.21	4.92	0.67	0.50
Cash dividends per share:					
Common/ADS	\$ 1.19	\$ 1.62	\$ 0.45	\$ 0.28	\$ 0.16
Preferred/ADS	1.19	1.62	0.45	0.39	0.54

(1) Amounts reported are net of impact of government charges and taxes of U.S.\$(68 million) in 2001, U.S.\$19 million in 2000, U.S.\$(143 million) in 1999 and U.S.\$23 million in 1998.

(2) Amounts reported are net of impact of government charges and taxes of U.S.\$(45 million) in 2001, U.S.\$(81 million) in 2000, U.S.\$(132 million) in 1999 and U.S.\$(377 million) in 1998.

(3)

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Amounts reported include financial charges in respect of the Petroleum and Alcohol Account of U.S.\$16 million in 2001, U.S.\$35 million in 2000, U.S.\$95 million in 1999 and U.S.\$385 million in 1998.

- (4) On April 24, 2000, our board of directors authorized a 1 for 100 reverse stock split effective May 23, 2000. Share data and basic and diluted earnings per share for all years presented give retroactive effect to this change.

Exchange Rates

There are two principal foreign exchange markets in Brazil, the commercial rate exchange market and the floating rate exchange market.

On January 13, 1999, the Brazilian government announced the unification of the exchange positions of the Brazilian financial institutions in the commercial rate exchange market and floating rate exchange market, which led to a convergence in the pricing and liquidity of both markets. However,

complete unification has not yet occurred and each market continues to be subject to specific regulation. The Brazilian government also allowed an increase in the exchange positions of institutions authorized to trade foreign currency to provide further liquidity to the foreign exchange markets. Most trade and financial transactions are carried out on the commercial rate exchange market. These transactions include the purchase or sale of our shares or the payment of dividends with respect to our shares to shareholders outside Brazil. Transactions not carried out on the commercial rate exchange market are generally carried out on the floating rate exchange market. Foreign currencies may only be purchased through Brazilian financial institutions authorized to operate in these markets. In both markets, rates are freely negotiated but may be influenced by the intervention of the Central Bank of Brazil.

From 1995 through January 1999, the Central Bank of Brazil allowed the gradual devaluation of the Real against the U.S. dollar by introducing new exchange rate policies that established a band within which the Real/U.S. dollar exchange rate could fluctuate (*faixa de flutuação*, or fluctuation band), and by agreeing to buy or sell, as applicable, U.S. dollars whenever the rate approached the upper or the lower limit of the band. Responding to pressure on the Real, on January 13, 1999, the Central Bank of Brazil widened the foreign exchange rate band. Because the pressure did not ease, on January 15, 1999, the Central Bank of Brazil allowed the Real to float freely. Since 1999, the Central Bank of Brazil has continued to allow the Real to float freely.

The Real devalued 9.3% in 2000, 18.7% in 2001, and 52.3% in 2002 against the U.S. dollar. As of June 13, 2003, the Real has appreciated to R\$2.857 per U.S.\$1.00, representing an appreciation of approximately 24.0% in 2003. The Real may depreciate or appreciate substantially in the future. See Risk Factors Risks Relating to Brazil.

The following table sets forth the commercial selling rate for U.S. dollars for the periods and dates indicated. The average exchange rates represent the average of the month-end exchange rates (R\$/U.S.\$) during the relevant period.

COMMERCIAL SELLING RATE FOR U.S. DOLLARS

	For the Year Ended December 31, (R\$ / U.S.\$)			
	High	Low	Average ⁽¹⁾	Period End
2002	3.955	2.271	2.924	3.533
2001	2.835	1.935	2.352	2.320
2000	1.985	1.723	1.830	1.956
1999	2.165	1.208	1.814	1.789
1998	1.209	1.117	1.161	1.209
2003				
January	3.662	3.276	3.439	3.526
February	3.658	3.493	3.511	3.564
March	3.564	3.353	3.493	3.353
April	3.336	2.890	3.115	2.890
May	3.028	2.865	2.947	2.966
June (through June 13)	2.978	2.849	2.886	2.857

Source: Central Bank of Brazil

(1) Year-end figures stated for calendar years 2002, 2001 and 2000 represent the average of the month-end exchange rates during the relevant period. The figure provided for the period of calendar year 2003 up to and including June 13, 2003 represents the average of the exchange rates at the close of trading on each business day during such period.

Brazilian law provides that, whenever there is a serious imbalance in Brazil's balance of payments or serious reasons to foresee such an imbalance, temporary restrictions on remittances from Brazil may be imposed by the Brazilian government. These types of measures may be taken by the Brazilian government in the future, including measures relating to remittances related to our Preferred or Common Shares or ADSs. See Risk Factors Risks Relating to Brazil.

Risk Factors

Risks Relating to Our Operations

Our operations are affected by the volatility of prices for crude oil and oil products.

Until January 2, 2002, the prices we were allowed to charge for crude oil and oil products (and, as a result, our recorded prices for the calculation of net operating revenues) were determined on the basis of a pricing formula established by the Brazilian government designed to reflect changes in the Real/U.S. Dollar exchange rate and international market prices for relevant benchmark products. However, as of January 2, 2002, the crude oil and oil products markets in Brazil were deregulated in their entirety.

Historically, international prices for crude oil and oil products have fluctuated widely as a result of many factors. We do not, and will not, have control over the factors affecting international prices for crude oil and oil products. These factors include:

global and regional economic and political developments in crude oil producing regions, particularly in the Middle East;

the ability of OPEC and other crude oil producing nations to set and maintain crude oil production levels and prices;

other actions taken by major crude oil producing or consuming countries;

global and regional supply and demand for crude oil and oil products;

competition from other energy sources;

domestic and foreign government regulations;

weather conditions; and

military action, such as the recent U.S. military action in Iraq.

The average prices of Brent crude, an international benchmark oil, were approximately U.S.\$25.02 per barrel for the year ended December 31, 2002, U.S.\$24.44 per barrel for the year ended December 31, 2001 and U.S.\$28.50 per barrel for the year ended December 31, 2000.

Changes in crude oil prices typically result in changes to prices for oil products. Lower crude oil prices have various effects on us, including decreasing our net operating revenues, net income and cash flows. In comparison, higher crude oil prices generally lead to increases in our net operating revenues, net income and cash flows.

We expect continued volatility and uncertainty in international prices for crude oil and oil products. Declines in international crude oil prices may adversely affect our business, results of operations and financial condition and the value of our proved reserves.

Prices remain regulated for natural gas, electricity and certain petrochemicals. These controls could have an adverse effect on revenues from these business activities.

Because of changes in government regulations, we face increased competition and may lose market share.

Substantial changes have been occurring in the oil and gas industry in Brazil as a result of the continuing process of deregulation by the Brazilian government. As part of this deregulation, the Brazilian government eliminated all price controls on crude oil and oil products in early 2002. Prices remain regulated, however, for natural gas, electricity and certain petrochemicals. The changes in government regulation have enabled multi-national and regional oil companies to enter the Brazilian energy market. We expect that competition in our downstream and upstream activities will increase further, as existing and new participants expand their activities as a result of these regulatory changes.

Although our prices for crude oil and oil products are based on international prices, in periods of high international prices or sharp devaluations of the Real, we may not be able to adjust our prices in Reais sufficiently to maintain parity with international prices.

Since the Brazilian government's elimination of all price controls on crude oil and oil products in January 2002, there have been periods of high international prices or sharp devaluations of the Real when we have been unable to increase prices in Reais sufficiently to maintain parity with international prices. While we do not have an obligation to supply the Brazilian market, during periods when the local prices of crude oil and oil products were below prevailing international prices, our competitors were unwilling to supply the local market. In order to ensure adequate supply of crude oil and oil products in Brazil, we sold crude oil and oil products below prevailing international prices.

As a result of deregulation of the Brazilian market, and the elimination of import tariffs in particular, our competitors can sell products in the Brazilian market at parity with international prices. In light of this increased competition, we have less flexibility to maintain local prices above international prices to compensate for revenues not realized in periods in which we sold crude oil and oil products below prevailing international market prices.

We may be required to sell some of our refining capacity in Brazil.

We presently own 98.6% of the existing refining capacity in Brazil. We plan to upgrade our present refineries and we may build new refineries in Brazil, sell participation interests in our present refineries to new partners or engage in asset swaps, as we did through our business combination in 2001 involving assets of Repsol-YPF S.A. Although we are not presently subject to any requirement to divest any assets, and the Brazilian government has not made any proposal in that respect, it is possible that we will be required to divest a portion of our refining capacity or other assets in the future. Any such divestiture could have a material adverse effect on our financial condition and results of operations.

Our ability to achieve growth is dependent upon our finding or acquiring additional reserves, as well as successfully developing current reserves, and risks associated with drilling may cause drilling operations to be delayed or cancelled.

Our ability to achieve our growth objectives is highly dependent upon our level of success in finding, acquiring or gaining access to additional reserves, as well as successfully developing current reserves. In general, the volume of production from crude oil and natural gas properties declines as reserves are depleted, with the rate of decline depending on reservoir characteristics. Unless we conduct successful exploration and development activities or acquire properties containing proved reserves, or both, our proved reserves will decline as reserves are extracted.

Our exploration and development activities expose us to the inherent risks of drilling, including the risk that no economically productive crude oil or natural gas reserves will be discovered. The costs of

drilling, completing and operating wells are often uncertain and numerous factors beyond our control may cause drilling operations to be curtailed, delayed or cancelled. Our future drilling, exploration and acquisition activities may not be successful and, if unsuccessful, could harm our future results of operations and financial condition.

Our crude oil and natural gas reserve estimates involve some degree of uncertainty and may prove to be incorrect over time.

The proved crude oil and natural gas reserves set forth in this annual report are our estimated quantities of crude oil, natural gas and natural gas liquids that geological and engineering data demonstrate with reasonable certainty to be recoverable from known reservoirs under existing economic and operating conditions (i.e. prices and costs as of the date the estimate is made). Our proved developed crude oil and natural gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods. There are numerous uncertainties inherent in estimating quantities of proved reserves. The reliability of proved reserve estimates depends on:

the quality and quantity of our geological, technical and economic data;

the prevailing crude oil and natural gas prices applicable to our production (which in the past have been subject to Brazilian government regulation);

the production performance of our reservoirs; and

extensive engineering judgments.

Many of the factors, assumptions and variables involved in estimating reserves are beyond our control and may prove to be incorrect. The results of our future drilling, testing and production activity may lead us to make significant revisions to our reserve estimates.

Our equipment, facilities and operations are subject to numerous environmental and health regulations which may become more stringent in the future and may result in increased liabilities and increased capital expenditures.

Our facilities are subject to a wide variety of federal, state and local laws, regulations and permit requirements relating to the protection of human health and the environment. We could be exposed to civil penalties, criminal sanctions and closure orders for non-compliance with these environmental regulations, which, among other things, limit or prohibit emissions or spills of toxic substances produced in connection with our operations. Current and past waste disposal and emissions practices may require us to clean up or retrofit our facilities at substantial cost and could result in substantial liabilities. The *Instituto Brasileiro do Meio Ambiente dos Recursos Naturais Renováveis* (Brazilian Institute of the Environment and Renewable Natural Resources), or IBAMA, has been investigating our oil platforms in the Campos Basin, and may impose fines, restrictions on operations or other sanctions in connection with its investigations.

We spent approximately U.S.\$466 million in 2002, U.S.\$473 million in 2001 and U.S.\$356 million in 2000 to comply with environmental laws. However, since environmental laws are becoming more stringent in Brazil and in other jurisdictions where we operate, it is likely that our environmental capital expenditures and costs for environmental compliance will increase, perhaps substantially, in the future. In addition, due to the possibility of unanticipated regulatory or other developments, the amount and timing of future environmental expenditures may vary widely from those currently anticipated. The amount of investments we make in any given year is subject to limitations by the Brazilian government. Accordingly, expenditures required for compliance with environmental

regulation could result in reductions in other strategic investments that we have planned, with a resulting decrease to our profits, and future environmental costs may harm our results of operations or financial condition.

In the past, significant oil spills have occurred and we have incurred, and may continue to incur, liabilities in connection with oil spills, including clean up costs, government fines, and potential lawsuits.

From time to time, oil spills occur in connection with our operations. Since January 1, 2000, we have experienced 11 significant oil spills. In each of these, we undertook cleanup efforts as promptly as possible. Nevertheless, in some situations, we were fined by various state and federal environmental agencies, became the defendant in several civil and criminal suits, and remain subject to several investigations and potential civil and criminal liabilities as a result of past oil spills. These or any future oil spills may have a material adverse effect on our financial condition or results of operations. Accordingly, if one or more of the potential liabilities resulting from these oil spills were to result in an actual fine or civil or criminal liability, our operations and financial condition could be negatively affected.

We may incur losses and spend time and money defending pending litigation and arbitration.

We are currently a party to numerous legal proceedings relating to civil, administrative, environmental, labor and tax claims filed against us. We are also pursuing discussions with various government authorities and with Repsol-YPF over our licenses, including our right to operate certain platforms, in connection with the 2001 Repsol-YPF asset swap. These claims involve a wide range of issues and seek substantial amounts of money and other remedies. Several individual disputes account for a significant part of the total amount of claims against us. Our audited financial statements as of December 31, 2002 include reserves totaling U.S.\$50 million as of that date, for probable and reasonably estimable losses and expenses we may incur in connection with all of our pending litigation and a separate provision of U.S.\$105 million related to various tax assessments received from the *Instituto Nacional de Seguridade Social* (National Security Institute, or INSS), as further described in Item 8 Financial Information Legal Proceedings .

In the event that a number of the claims that we consider to represent remote or reasonably possible risks of loss were to be decided against us, or in the event that the losses estimated turn out to be higher than the reserves made, the aggregate cost of unfavorable decisions could have a material adverse effect on our financial condition and results of operations. Additionally, our management may be required to direct its time and attention to defending these claims, which could preclude them from focusing on our core business. Depending on the outcome, certain litigation, including matters involving our platforms and asset swaps, could result in restrictions on our operations and have a material adverse effect on certain of our businesses.

Proposed legislative changes to the ICMS tax imposed by the State of Rio de Janeiro may have a material adverse effect on our results of operation and financial condition.

The governor of the State of Rio de Janeiro is considering signing a bill into law that would increase the amount of *Imposto sobre Circulação de Mercadorias e Serviços* (state value-added tax, or ICMS) that we are required to pay by approximately R\$5.4 billion (U.S.\$1.9 billion) per year. The proposed new law would change the point of collection of part of the ICMS from the refinery level to the wellhead level of production in the State of Rio de Janeiro. If it becomes effective, we may be unable to utilize part of the taxes imposed at the wellhead level in Rio de Janeiro to offset taxes that are imposed at the refinery level in other states, and therefore would be paying taxes on the same oil products at both the production and refining level. We believe that the proposed new law would be an unconstitutional form of taxation,

and intend to challenge the law if it becomes effective. If the law becomes effective, it would significantly increase the amount of taxes we pay, and such increase could have a material adverse effect on our level of investments and, therefore, on our results of operation and financial condition.

Labor disputes, strikes, work stoppages and protests could lead to increased operating costs.

All of our employees, other than our maritime employees, are subject to a collective bargaining agreement with the Oil Workers Unified Federation, which was signed on December 4, 2002, retroactive to September 1, 2002. This collective bargaining agreement will expire on October 31, 2003. On December 27, 2002, we signed a separate collective bargaining agreement with the maritime employees union retroactive to November 1, 2002, which will expire on October 31, 2003.

From time to time, we have been subject to strikes and work stoppages. In 2001, our oil workers began a five-day strike. While this strike was settled, it did result in a decrease in crude oil production. If our workers were to strike, the resulting work stoppages could have an adverse effect on us, as we do not carry insurance for losses incurred as a result of business interruptions of any nature, including business interruptions caused by labor action. As a result, our financial condition and results of operations could be adversely affected by future strikes, work stoppages, protests or similar activities.

Our expansion into the domestic power market is relatively recent and has generated losses, and the regulatory environment remains uncertain.

Consistent with the global trend of other major oil and gas companies and to secure demand for our natural gas, we are currently expanding our business into the domestic power market. Despite a number of incentives introduced by the former Brazilian government to promote the development of thermoelectric power plants, development of such plants by private investors has been slow to progress. We currently invest in 16 of the 39 gas-fired power generation plants being built or proposed to be built in Brazil under the program to promote the development of thermoelectric plants, known as the *Programa Prioritário de Termoelectricidade* (Thermoelectric Priority Program, or PPT). We invest in some of these plants with partners, many of whom may have power purchase agreements with the plants. We have had contractual disputes in connection with these investments and other disputes may occur. Depending on the outcome of any such disputes, they could have an adverse economic impact on us, including on the profitability of our investments.

We have a limited history of investing in thermoelectric plants, and thermoelectric plants have not previously operated in a competitive environment in Brazil. Thermoelectric plants have faced difficulties passing on to electricity offtakers foreign currency financing costs of developing new generating capacity, and have had to contend with the reluctance of many distribution companies to sign power purchase agreements due mainly to their existing initial contracts, which provide for a guaranteed price from 1998 to 2002, which is phased out over the following four years. In addition, demand for thermoelectric power in Brazil has been lower than expected. In 2002, Congress passed a law increasing government intervention in the market, and the current administration is studying the implementation of changes that could be material to the natural gas and power sector. It is not clear that thermoelectric power generation will remain a priority for the country. In addition, the energy policy of the new administration remains uncertain.

During 2002, we experienced significant losses relating to our investments in thermoelectric power generation. As a result, in 2002 we created a U.S.\$205 million provision for losses related to our commitments to off-take electricity from certain thermoelectric power plants. We increased this provision in the first quarter of 2003 by a further U.S.\$205 million. After deducting the losses incurred in the first quarter of 2003, which amounted to U.S.\$111 million, the balance of the provision totaled U.S.\$316

million as of March 31, 2003. We have limited our investments in this area, but our participation in the domestic power market may never become profitable. As a result, our participation in this market may adversely affect our operating results and financial condition.

We are in the process of implementing a new Strategic Plan, which may have a material adverse effect on our competitive position or ability to expand our operations.

On April 17, 2003, we announced the adoption of revisions to our Strategic Plan for the period 2003-2007. The new Strategic Plan maintains our core strategies and objectives, but reduces our overall budgeted capital expenditures for the year 2003. The revisions for 2003 reflect an environment of decreased access to financial markets and increased volatility in foreign exchange rates and crude oil prices. The changes to our Strategic Plan, particularly the decrease in overall budgeted capital expenditures, could affect our ability to achieve certain of our strategic goals, and in particular, could negatively impact our competitive position or ability to expand our operations.

We may not be able to obtain financing for all of our planned investments.

The Brazilian government maintains control over our budget and establishes limits on our investments and long-term debt. As a state-controlled entity, we must submit our proposed annual budgets to the Ministry of Planning, Budget and Management, the Ministry of Mines and Energy, and the Brazilian Congress for approval. We are endeavoring to obtain financing that does not require Brazilian government approval, such as structured financings, but there can be no assurance that we will succeed. As a result, we may not be free to make all the investments we envision, including those we have agreed to make to expand and develop our crude oil and natural gas fields. If we are unable to make these investments, our future operating results and financial condition may be adversely affected. In addition, failure to make our planned investments in Brazil could hurt our competitive position in the Brazilian oil and gas sector, particularly as other companies enter the market.

Currency fluctuations could have a material adverse effect on our financial condition and results of operations, because most of our revenues are in Reais and a large portion of our liabilities are in foreign currencies.

The principal market for our products is Brazil, and over the last three fiscal years over 86% of our revenues have been denominated in Reais. A substantial portion of our indebtedness and some of our operating expenses and capital expenditures are, and are expected to continue to be, denominated in or indexed to U.S. Dollars and other foreign currencies. In addition, during the year ended December 31, 2002, we imported U.S.\$5.2 billion of crude oil and oil products, the prices of which were all denominated in U.S. Dollars.

As a result of downward pressure on the Real, on January 15, 1999, the Central Bank of Brazil allowed the Real to float freely. The Real depreciated 9.3% in 2000, 18.7% in 2001 and 52.3% in 2002 against the U.S. Dollar. As of June 13, 2003, the exchange rate of the Real to the U.S. Dollar was R\$2.857 per U.S.\$1.00, representing an appreciation of approximately 24.0% in 2003 year-to-date. There is no assurance that this trend will continue, and the Real may depreciate further in the future. We cannot predict the impact on our operations of any future substantial devaluation of the Real, which could adversely affect our operating cash flows and our ability to meet our foreign currency-denominated obligations. You should consider this risk in light of past devaluations of the Real caused by inflationary and other pressures.

We are exposed to increases in prevailing market interest rates.

As of December 31, 2002, approximately 45% of our total indebtedness consisted of floating rate debt. Although we are changing our risk management practices, we have not yet entered into derivative contracts or made other arrangements to hedge against interest rate risk. Accordingly, if market interest rates (principally LIBOR) rise, our financing expenses will increase.

In the aftermath of the U.S. military action in Iraq there may be changes to the international oil markets, some of which could have an adverse effect on us.

Following the U.S. military action in Iraq, the United Nations eliminated sanctions that had limited Iraq's ability to participate in the international oil markets. As a result, it is expected that in the future, Iraq will substantially increase its production and export sales of crude oil and oil products. Given the uncertainty surrounding the circumstances under which Iraq's oil industry will be managed over the next few years, it is impossible to predict the economic or political goals which the United States government or any other party controlling such industry will seek to achieve. The changes to the international oil markets that could result from Iraq's re-entry into such markets could have a material adverse effect on our financial condition and results of operations.

Our ability to obtain affordable insurance coverage may be adversely affected by changes in the insurance markets, our recent history of claims under our insurance policies and changes in the insurance markets following the September 11, 2001 terrorist attacks.

The insurance premiums charged for some or all of the coverage historically maintained by us and our subsidiaries has increased significantly in the past as a result of changes in the insurance markets and claims under our insurance policies. Following the March 15, 2001 explosion that sank Platform P-36, our insurance costs increased substantially, from U.S.\$36.0 million in 2001 to U.S.\$46.4 million in 2002. For 2003, these costs have decreased to U.S.\$30.5 million. Our insurance costs may increase, or coverage may be unavailable, in the future. The premiums for war risk and terrorism insurance have also increased substantially in the past, and in some cases, such insurance is not available. Following the September 11, 2001 terrorist attacks, insurance underwriters have issued general notices of cancellations to their customers for war risk and terrorism insurance in respect of a wide variety of insurance coverage, including, but not limited to, liability coverage. We do not know whether underwriters will offer to reinstate some or all of these types of coverage and, if reinstatement is offered, the extent to which premiums may be increased. The failure to obtain insurance against risks inherent in our business may expose us to catastrophic losses that may materially affect our results of operations.

We may not achieve the anticipated timing, efficiencies and benefits of integrating Perez Companac into our business

On October 17, 2002, we agreed to acquire 58.62% of the capital stock of Perez Companac, the second largest Argentine energy company, from the Perez Companac family and the Perez Companac Foundation for approximately U.S.\$1.03 billion. The completion of the Perez Companac acquisition was contingent upon antitrust approval from the Argentine government's *Comisión Nacional de Defensa de la Competencia* (the National Council for the Defense of Competition or the CNDC). The CNDC approved the transaction on May 13, 2003. Upon approval of the transaction, Perez Companac agreed to divest itself of its equity interest in Transener S.A., which operates most of Argentina's high-tension electricity lines. This divestiture is in line with Perez Companac's strategic plan and does not affect our strategic plan in Latin America.

It is possible that we may not achieve the anticipated timing, efficiencies and benefits of integrating Perez Companac into our business. Differing corporate cultures, legal and regulatory

environments, personalities, languages and other factors may pose challenges to the success of the acquisition. Failure to achieve the anticipated timing, efficiencies and benefits of integrating Perez Companac into our business may negatively impact us and our ability to implement our strategic objectives in South America.

Perez Companac is subject to substantial risks relating to its business and operations in Argentina and other South American countries.

Perez Companac is an Argentine *sociedad anonima* with approximately 59.6% of its total crude oil and natural gas production and 45.6% of its proved crude oil and natural gas reserves located in Argentina at December 31, 2002. As a result, Perez Companac's financial condition and results of operation may be adversely affected by Argentine political instability, fluctuations in the Argentine economy and governmental actions concerning the economy, including:

the imposition of exchange controls, which could restrict the flow of capital out of Argentina and make it more difficult for Perez Companac to service its non-Peso denominated debt;

the imposition of restrictions on the export of crude oil and oil products, which could decrease Perez Companac's U.S. Dollar cash receipts;

the devaluation of the Argentine Peso, which could lead to significant losses in Perez Companac's net foreign currency position and, therefore, restrict its ability to make payment on its foreign-currency denominated debt;

increases in export tax rates for crude oil and oil products, which could lead to a reduction in Perez Companac's export margins and cash flows; and

other measures enacted by the Argentine government to address Argentina's economic crisis, including the pesification of utility rates, which combined with the devaluation of the Argentine Peso, resulted in payment defaults by three of Perez Companac's affiliated utility companies, TGS, CIESA (the parent of TGS), and Transener, and which could lead to defaults by other affiliated utility companies.

Perez Companac is also active in Venezuela, Ecuador, Bolivia, Peru and Brazil. Production from Venezuela accounted for approximately 28.7% of Perez Companac's total average production in barrels of oil equivalent in 2002, constituting the largest operation outside Argentina. Accordingly, Perez Companac's operations may be negatively affected by:

the continuing political and economic instability in Venezuela, particularly the labor strikes and other forms of political protest directed against the Hugo Chavez administration;

any decisions by the Organization of Petroleum Exporting Countries (OPEC) to decrease production volumes, as Venezuela is a member of OPEC; and

any decision by the Venezuelan government to modify the terms and conditions of Perez Companac's operating agreements in Venezuela.

If one or more of the risks described above were to materialize, we may not be able to realize the benefits that we currently intend to realize from the Perez Companac acquisition, and that development might negatively impact us and our ability to implement our strategic objectives in South America.

Risks Relating to the Relationship between us and the Brazilian Government

The interests of the Brazilian government, as our controlling shareholder, may conflict with the interests of our other shareholders and creditors.

The Brazilian government, as our controlling shareholder, has pursued, and could continue to pursue, certain of its macroeconomic and social objectives through us. These initiatives have not always been in our best interests or the best interests of our other shareholders and creditors. Brazilian law requires the Brazilian government to own a majority of our voting stock, and so long as it does, the Brazilian government will have the power to elect a majority of the members of our board of directors and, through them, a majority of the executive officers who are responsible for our day-to-day management. As a result, we may engage in activities that give preference to the Brazilian government's agenda rather than to our own economic and business objectives. In particular, we continue to assist the Brazilian government to ensure that the supply of crude oil and oil products in Brazil meets Brazilian consumption requirements. Accordingly, we may continue to make investments, incur costs and engage in sales on terms that are not necessarily in our best interests or in the best interests of our shareholders and creditors.

Luiz Inácio Lula da Silva was elected President of Brazil in October 2002 and took office on January 1, 2003. As a result, there have been significant changes in our board of directors and senior management in recent months. The reconstituted board of directors and new senior management may pursue a strategy or conduct operations in a manner that diverges significantly from the strategy and operations pursued by our previous management. Changes in government or government policy could have a material adverse effect on us and our business, results of operations, financial condition or prospects.

If the Brazilian government reinstates controls over the prices we can charge for crude oil and oil products, such price controls could affect our financial condition and results of operations.

In the past, the Brazilian government set prices for crude oil and oil products in Brazil, often below prevailing prices on the world oil markets. These prices involved elements of cross-subsidy among different oil products sold in various regions in Brazil. The cumulative impact of this price regulation system on us is recorded as an asset on our balance sheet under the line item "Petroleum and Alcohol Account Receivable from the Brazilian government." The balance of the account at December 31, 2002 was U.S.\$182 million. Effective January 2, 2002, all price controls for crude oil and oil products ended, and while no price controls were imposed in 2002, the Brazilian government could decide to reinstate price controls in the future as a result of market instability or other conditions. If this were to occur, our financial condition and results of operations could be adversely affected.

Brazilian political and economic conditions may have a material adverse effect on us.

The Brazilian economy has been characterized by significant involvement by the Brazilian government, which often changes monetary, credit and other policies to influence Brazil's economy. The Brazilian government's actions to control inflation and other economic policies have often involved wage and price controls, modifications to the Central Bank's base interest rates, and other measures, such as the freezing of bank accounts, which occurred in 1990.

The Brazilian government's economic policies may have important effects on Brazilian corporations and other entities, including us, and on market conditions and prices of Brazilian securities. Our financial condition and results of operations may be adversely affected by the following factors and the Brazilian government's response to these factors:

devaluations and other exchange rate movements;

inflation;

exchange control policies;

social instability;

price instability;

energy shortages;

interest rates;

liquidity of domestic capital and lending markets;

tax policy; and

other political, diplomatic, social and economic developments in or affecting Brazil.

In addition, we cannot predict the effect that the policies of the new Brazilian administration may have on Brazilian economic conditions or on our financial condition and results of operations.

The current Argentine economic, political and social crisis could adversely affect the financial condition and results of operation of Perez Companc and our other Argentine operations.

Since 1999, the Argentine economy has been in a recession marked by reduced levels of consumption and investment, increased unemployment, declining gross domestic product and capital flight.

On December 20, 2001, President Fernando de la Rúa resigned, and since then, Argentina has had several presidents, including President Eduardo Duhalde, who held office from January 2002 to May 2003. During his term, President Duhalde and his government undertook a number of far-reaching initiatives, including:

ratifying the suspension of payment of certain of Argentina's sovereign debt;

amending Argentina's Convertibility Law to allow the exchange rate of the Argentine Peso to float, breaking the Peso's decade-old one-to-one relationship to the U.S. Dollar, and resulting in a 66.4% decline in the value of the Peso against the U.S. Dollar from January 7, 2002 to March 31, 2003;

converting certain U.S. dollar-denominated debts into peso-denominated debts at a one-to-one exchange rate and U.S. dollar-denominated bank deposits into peso-denominated bank deposits at an exchange rate of 1.4 Argentine Pesos per U.S.\$1.00;

restructuring bank deposits and maintaining restrictions on bank withdrawals;

enacting an amendment to the Argentine Central Bank's charter to (i) allow it to print currency in excess of the amount of the foreign reserves it holds, (ii) make short-term

advances to the Argentine federal government and (iii) provide financial assistance to financial institutions with liquidity constraints or solvency problems;

imposing restrictions on transfers of funds abroad subject to certain exceptions; and

requiring the deposit into the banking system of foreign currency earned from exports, subject to certain exceptions.

The rapid and radical nature of recent changes in the Argentine social, political, economic and legal environment created an atmosphere of great uncertainty in the banking system. As a result, commercial and financial activities were virtually paralyzed during 2002, further aggravating the economic recession which precipitated the current crisis. Moreover, due to the depth of the social and political crisis that affected Argentina in 2002, Argentina continues to face risks, including: (i) civil unrest, rioting, looting, nation-wide protests, widespread social unrest and strikes, (ii) expropriation, nationalization and forced renegotiation or modification of existing contracts and (iii) changes in taxation policies, including royalty and tax increases and retroactive tax claims.

On May 25, 2003, a new president, Néstor Kirchner, took office. There is uncertainty as to the nature and scope of the measures to be adopted by Mr. Kirchner's government to address many of the country's unresolved economic problems, including the renegotiation of its external debt. We cannot predict the policies the new Kirchner administration may adopt or the effect that those policies could have on Argentine economic conditions and our investments in Argentina.

We have acquired a majority interest in several entities with operations in Argentina, including Perez Companc. The financial condition and results of operation of Perez Companc and other acquisitions may be adversely affected by Argentine political instability, fluctuations in the Argentine economy and governmental actions concerning the economy, which could result in our failure to realize the benefits we currently expect to realize from those acquisitions.

Historical Brazilian government control of our sales prices and regulation of our operating revenues mean that our results of operations cannot be easily compared from year to year.

One of the tools available to the Brazilian government to control inflation and pursue other economic and social objectives has been the regulation of oil product prices. The method by which the Brazilian government has controlled our prices has varied from year to year. Until December 31, 2001, the Brazilian government regulated the prices at which we were permitted to sell our oil products. The Brazilian government also established freight subsidies to ensure uniform oil product prices throughout Brazil, but these subsidies have since been phased out. Beginning in July 1998, and until the institution of price deregulation on January 2, 2002, the Brazilian government established a new methodology for calculating our net operating revenues.

Because of this government price control and the change in methodology:

the various line items in our financial statements are not necessarily comparable from period to period; and

our results of operations reflect not only our consolidated operations, but also the results of economic activity undertaken on behalf of the Brazilian government.

Additionally, from time to time, the Brazilian government may impose specific taxes or other special payment obligations on our operations that may affect our results of operations.

We do not own any of the crude oil and natural gas reserves in Brazil.

A guaranteed source of crude oil and natural gas reserves is essential to an oil and gas company's sustained production and generation of income. As a result, many oil and gas companies own crude oil and natural gas reserves. Under Brazilian law, the Brazilian government owns all crude oil and natural gas reserves in Brazil. We possess the exclusive right to develop our reserves pursuant to concession agreements awarded to us by the Brazilian government, but if the Brazilian government were to restrict or prevent us from exploiting these crude oil and natural gas reserves, our ability to generate income would be adversely affected.

The Brazilian government is no longer contingently liable for our liabilities in the event of our insolvency.

On March 1, 2002, an amended Brazilian corporate law became effective. Among other changes, the amended law provides for the termination of the contingent liability of the Brazilian government for the liabilities and obligations of mixed capital companies, such as us and, as a consequence, for the termination of mixed capital companies' immunity from bankruptcy legal proceedings. Accordingly, the Brazilian government will not be contingently liable, as it was in the past, for any of our obligations incurred after the enactment of this law.

Risks Relating to Brazil

The Brazilian government's actions to maintain economic stability, as well as public speculation about possible future actions, may contribute significantly to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets.

Our principal market is Brazil, which has periodically experienced extremely high rates of inflation. Inflation, along with recent governmental measures to combat inflation and public speculation about possible future measures, has had significant negative effects on the Brazilian economy. The annual rates of inflation, as measured by the National Consumer Price Index (*Índice Nacional de Preços ao Consumidor*), have decreased from 2,489.1% in 1993 to 929.3% in 1994, to 8.4% in 1999 and to 5.3% in 2000. The same index increased to 9.4% during 2001 and to 14.7% in 2002.

Brazil may experience high levels of inflation in the future. The lower levels of inflation experienced since 1994 may not continue. Future governmental actions, including actions to adjust the value of the Real, could trigger increases in inflation.

Over the last three fiscal years, approximately 86% of our revenues have been denominated in Reais, although prices for crude oil and oil products have been based on international prices. A substantial portion of our indebtedness and some of our operating expenses and capital expenditures are, and are expected to continue to be, denominated in or indexed to the U.S. Dollar and other foreign currencies. In addition, during the year ended December 31, 2002, we imported approximately U.S.\$5.2 billion of crude oil and oil products, the prices of which were all denominated in U.S. Dollars.

As a result of inflationary pressures, the Real and its predecessor currencies have been devalued periodically during the last four decades. Through this period, the Brazilian government has implemented various economic plans and utilized a number of exchange rate policies, including sudden devaluations, periodic mini-devaluations during which the frequency of adjustments has ranged from daily to monthly, floating exchange rate systems, exchange controls and dual exchange rate markets. From time to time, there have been significant fluctuations in the exchange rates between the Real and the U.S. Dollar and other currencies. For example, the Real declined in value against the U.S. Dollar by 9.3% in 2000, 18.7% in 2001 and 52.3% in 2002.

Devaluation of the Real relative to the U.S. Dollar could create additional inflationary pressures in Brazil by generally increasing the price of imported products and requiring recessionary governmental policies to curb aggregate demand. On the other hand, appreciation of the Real against the U.S. Dollar may lead to a deterioration of the country's current account and the balance of payments, as well as dampen export-driven growth. The potential impact of the floating exchange rate and of measures by the Brazilian government aimed at stabilizing the Real is uncertain. In addition, a substantial increase in inflation may weaken investor confidence in Brazil. Future devaluation of the Real could adversely affect our results of operations and financial condition.

The current crisis in Argentina could adversely affect the Brazilian economy, adversely affecting our ability to finance our operations and our investments in Argentina.

In the past, the Brazilian economy and the securities of Brazilian companies have been, to varying degrees, influenced by economic and market conditions in other emerging market countries, particularly in Latin America, as well as by investors' responses to those conditions.

Any further deterioration of the Argentine economy and further devaluation of the Argentine Peso could adversely affect the Brazilian economy, as Argentina is one of Brazil's principal trading partners, accounting for 26% of Brazil's exports in 2002. Adverse developments in the Brazilian economy could, in turn, negatively impact our business and results of operations.

Risks Relating to our Equity and Debt Securities

The Brazilian securities markets are smaller, more volatile and less liquid than the major U.S. and European securities markets and therefore may limit your ability to sell the common or preferred shares underlying our ADSs.

The Brazilian securities markets are smaller, more volatile and less liquid than the major securities markets in the United States and other jurisdictions, and are not as highly regulated or supervised. The relatively small capitalization and liquidity of the Brazilian equity markets may substantially limit your ability to sell the common or preferred shares underlying our ADSs at the price and time you desire. These markets may also be substantially affected by economic circumstances unique to Brazil, such as currency devaluations.

You may be unable to exercise preemptive rights with respect to the common or preferred shares underlying the ADSs.

Holders of ADSs that are residents of the United States may not be able to exercise the preemptive rights relating to the common or preferred shares underlying our ADSs unless a registration statement under the U.S. Securities Act of 1933 is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the common or preferred shares relating to these preemptive rights, and therefore we may not file any such registration statement. If a registration statement is not filed and an exemption from registration does not exist, Citibank N.A., as depositary, will attempt to sell the preemptive rights, and you will be entitled to receive the proceeds of the sale. However, the preemptive rights will expire if the depositary cannot sell them. For a more complete description of preemptive rights with respect to the common or preferred shares, see Item 10 Additional Information Memorandum and Articles of Association Preemptive Rights.

You may not be able to sell your ADSs at the time or the price you desire because an active or liquid market for our ADSs may not be sustained.

Our preferred ADSs have been listed on the New York Stock Exchange since February 21, 2001, while our common ADSs have been listed on the New York Stock Exchange since August 7, 2000. Although our ADSs are already traded on the New York Stock Exchange, we cannot predict whether an active liquid public trading market for our ADSs will be sustained. Active, liquid trading markets generally result in lower price volatility and more efficient execution of buy and sell orders for investors. Liquidity of a securities market is often a function of the volume of the underlying shares that are publicly held by unrelated parties. Although ADS holders are entitled to withdraw the common or preferred shares underlying the ADSs from the depository at any time, we do not anticipate that a public market for our common or preferred shares will develop in the United States.

Restrictions on the movement of capital out of Brazil may impair your ability to receive dividends and distributions on, and the proceeds of any sale of, the common or preferred shares underlying the ADSs and may impact our ability to service certain debt obligations.

The Brazilian government may impose temporary restrictions on the conversion of Brazilian currency into foreign currencies and on the remittance to foreign investors of proceeds from their investments in Brazil. Brazilian law permits the Brazilian government to impose these restrictions whenever there is a serious imbalance in Brazil's balance of payments or there are reasons to foresee a serious imbalance.

The Brazilian government imposed remittance restrictions for approximately six months in 1990. Similar restrictions, if imposed, could impair or prevent the conversion of dividends, distributions, or the proceeds from any sale of common or preferred shares from Reais into U.S. dollars and the remittance of the U.S. dollars abroad. The Brazilian government could decide to take similar measures in the future. In such a case, the depository for the ADSs will hold the Reais it cannot convert for the account of the ADS holders who have not been paid. The depository will not invest the Reais and will not be liable for the interest.

Additionally, if the Brazilian government were to impose restrictions on our ability to convert Reais into U.S. dollars, we would not be able to make payment on our dollar-denominated debt obligations. For example, any such restrictions could prevent us from making funds available to our subsidiary, Petrobras International Finance Company (PIFCo), for payment of its debt obligations, certain of which are supported by us through standby purchase agreements.

If you exchange your ADSs for common or preferred shares, you risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.

The Brazilian custodian for our common or preferred shares underlying our ADSs must obtain a certificate of registration from the Central Bank of Brazil to be entitled to remit U.S. dollars abroad for payments of dividends and other distributions relating to our preferred and common shares or upon the disposition of the common or preferred shares. If you decide to exchange your ADSs for the underlying common or preferred shares, you will be entitled to continue to rely, for five Brazilian business days from the date of exchange, on the custodian's certificate of registration. After that period, you may not be able to obtain and remit U.S. dollars abroad upon the disposition of the common or preferred shares, or distributions relating to the common or preferred shares, unless you obtain your own certificate of registration or register under Resolution No. 2,689, of January 26, 2000, of the *Conselho Monetário Nacional* (National Monetary Council), which entitles registered foreign investors to buy and sell on the Brazilian Stock Exchange. If you do not obtain a certificate of registration or register under Resolution

No. 2,689, you will generally be subject to less favorable tax treatment on gains with respect to the common or preferred shares.

If you attempt to obtain your own certificate of registration, you may incur expenses or suffer delays in the application process, which could delay your ability to receive dividends or distributions relating to the common or preferred shares or the return of your capital in a timely manner. The custodian's certificate of registration or any foreign capital registration obtained by you may be affected by future legislative or regulatory changes, or that additional restrictions applicable to you, the disposition of the underlying common or preferred shares or the repatriation of the proceeds from disposition will not be imposed in the future.

You may face difficulties in protecting your interests as a shareholder because we are subject to different corporate rules and regulations as a Brazilian company and because holders of our common shares, preferred shares and ADSs have fewer and less well-defined shareholders rights than those traditionally enjoyed by United States shareholders.

Our corporate affairs are governed by our bylaws and the Brazilian corporate law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States, such as the States of Delaware or New York, or in other jurisdictions outside Brazil. In addition, your rights as an ADS holder or the rights of holders of the common or preferred shares under Brazilian corporate law to protect interests relative to actions by our board of directors may be fewer and less well-defined than those under the laws of other jurisdictions.

Although insider trading and price manipulation are considered crimes under Brazilian law, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or markets in some other jurisdictions. In addition, rules and policies against self-dealing and regarding the preservation of shareholder interests may be less well-defined and enforced in Brazil than in the United States, putting holders of our common shares, preferred shares and ADSs at a potential disadvantage. Corporate disclosure may be less complete or informative than what may be expected of a U.S. public company.

We are a mixed-capital company organized under the laws of Brazil and all of our directors and officers reside in Brazil. Substantially all of our assets and those of our directors and officers are located in Brazil. As a result, it may not be possible for you to effect service of process upon us or our directors and officers within the United States or other jurisdictions outside Brazil or to enforce against us or our directors and officers judgments obtained in the United States or other jurisdictions outside Brazil. Because judgments of U.S. courts for civil liabilities based upon the U.S. federal securities laws may only be enforced in Brazil if certain requirements are met, you may face more difficulties in protecting your interests in the case of actions against us or our directors and officers than would shareholders of a corporation incorporated in a state or other jurisdiction of the United States.

Preferred shares and the ADSs representing preferred shares generally do not give you voting rights.

A portion of our ADSs represent our preferred shares. Under Brazilian law and our bylaws, holders of preferred shares generally do not have the right to vote in meetings of our stockholders. This means, among other things, that holders of ADSs representing preferred shares are not entitled to vote on important corporate transactions or decisions. See Item 10 Additional Information Memorandum and Articles of Incorporation Voting Rights for a discussion of the limited voting rights of our preferred shares.

Developments in other emerging market countries may affect the trading values of our securities.

Securities of Brazilian companies have been influenced by economic and market conditions in other emerging market countries to varying degrees. Although economic conditions are different in each country, investors' reactions to developments in one country may affect the securities of issuers in other countries, including Brazil. Between the fourth quarter of 1997 and the first quarter of 1999, the international financial markets experienced significant volatility, and a large number of market indices, including those in Brazil, declined significantly. The 1997 Asian economic crisis, the 1998 Russian debt moratorium and devaluation of the Russian currency, and the recent uncertainty caused by Argentina's economic crisis, for example, resulted in increased volatility in securities markets in Latin America and in other emerging market countries.

ITEM 4. INFORMATION ON THE COMPANY

History and Development of the Company

Petróleo Brasileiro S.A. PETROBRAS is a mixed-capital company created pursuant to Law No. 2,004 (effective as of October 3, 1953).

A mixed-capital company is a Brazilian corporation created by special law of which a majority of the voting capital must be owned by the Brazilian federal government, a state or a municipality. We are controlled by the Brazilian federal government, but our common and preferred shares are publicly traded. Our principal executive office is located at Avenida República do Chile, 65, 20035-900 Rio de Janeiro RJ, Brazil and our telephone number is (55-21) 2534-4477.

We began operations in Brazil in 1954 as a wholly-owned government enterprise responsible for all hydrocarbon activities in Brazil. From that time until 1995, we had a government-granted monopoly for all crude oil and gas production, refining and distribution activities in Brazil. On November 9, 1995, the Brazilian Constitution was amended to authorize the Brazilian government to contract with any state or privately owned company to carry out the activities related to the upstream and downstream segments of the Brazilian oil and gas sector. This amendment eliminated our legal monopoly.

Based upon our 2002 consolidated revenues, we are the largest corporation in Brazil and the third largest industrial corporation in Latin America. For the year ended December 31, 2002, we had sales of products and services of U.S.\$32,987 million, net operating revenues of U.S.\$22,612 million and net income of U.S.\$2,311 million.

We engage in a broad range of oil and gas activities, which cover the following segments of our operations:

exploration, development and production of crude oil and oil products in Brazil;

refining, transportation and marketing of crude oil, oil products and fuel alcohol, including investments in petrochemicals;

distribution of oil products and fuel alcohol to end-users;

commercialization and transportation of natural gas produced in or imported into Brazil, including participation in natural gas distribution and transportation companies in Brazil and ownership in and development of thermoelectric power projects and related power activities in Brazil; and

international activities, including exploration and production, transportation, refining, distribution of crude oil and oil products outside of Brazil and natural gas and power activities outside of Brazil.

For a breakdown of total revenues by category of activity for each of the last three financial years, see Item 5 Operating and Financial Review and Prospects Business Segments.

The crude oil and natural gas industry in Brazil has experienced significant reforms since the enactment of Law No. 9,478, or the Oil Law, on August 6, 1997, which established competition in Brazilian markets for crude oil, oil products and natural gas in order to benefit end-users. Effective January 2, 2002, the Brazilian government deregulated prices for crude oil and oil products. See Regulation of the Oil and Gas Industry in Brazil Price Regulation. The gradual transformation of the oil and gas industry since 1997 has led to increased participation by international companies in Brazil across all segments of our business, both as our competitors and partners.

In conjunction with the reforms in the Brazilian energy industry in 2001, we completed a reorganization designed to ensure our competitiveness and improved profitability in the evolving Brazilian energy markets. This reorganization included:

creation of functional business segments to improve information flow and decision-making;

incorporation of rate-of-return targets for individual segments;

increased emphasis on integrated energy projects that allow us to competitively participate in all aspects of the energy business; and

amendment of our bylaws to enhance transparency and corporate efficiency.

Overview by Business Segment

Exploration, Development and Production

We participate in exploration, development and production activities throughout Brazil and, as of December 31, 2002, in 8 other countries (Angola, Argentina, Bolivia, Colombia, United States, Nigeria, Trinidad & Tobago and Equatorial Guinea), excluding Petrobras' activities. Our reserves are primarily located in the offshore Campos Basin, which represents Brazil's largest oil region and one of the most prolific oil and gas producing areas in South America. As of December 31, 2002, we had estimated proved developed and undeveloped reserves of approximately 10.5 billion barrels of oil equivalent, compared to 9.3 billion barrels of oil equivalent as of December 31, 2001, which were composed of 9.0 billion barrels of crude oil and condensate and 9.5 trillion cubic feet of natural gas, making us the sixth largest publicly traded oil and gas company in the world based upon total proved reserves.

Our reserve base has grown over the last five years. Our worldwide proved reserves have increased at an annual average growth rate of 2.7%, primarily as a result of our deepwater exploration and development success. Over the last five years, our average daily production has grown at an average annual growth rate of 10.9% to 1.54 million barrels per day of crude oil and natural gas liquids, or NGLs, and 1.65 billion cubic feet of natural gas per day for the year ended December 31, 2002.

Refining, Transportation and Marketing

We own and operate 11 refineries in Brazil with a gross aggregate capacity of 1.93 million barrels of crude oil per day. In the year ended December 31, 2002, we processed 591 million barrels of crude oil, or 1.62 million barrels per day. We produced 1.64 million barrels of oil products per day in 2002, composed of 36% diesel fuel, 19% gasoline, 17% fuel oil, 13% naphtha and jet fuel and 15% other oil products. Our average refinery utilization of such oil products was 84% over the past three years, with the same installed capacity of 1.93 million barrels of crude oil per day since 2000.

In addition, we own interests in 2 refineries in Bolivia and 1 in Argentina (the operating results of which are accounted for in our international business segment), resulting in a total refining capacity in South America (excluding Brazil) of 0.09 million barrels per day. In the year ended December 31, 2002, we processed 0.06 million barrels per day in Bolivia and Argentina.

We operate an extensive storage network, with an aggregate capacity of 63 million barrels as of December 31, 2002, which enables us to supply oil products throughout Brazil. In addition, we operate a pipeline network for crude oil and oil products of approximately 3,915 miles (6,300 kilometers) of which approximately 72% is typically devoted to crude oil deliveries. We are currently reorganizing our crude oil transportation capabilities to better serve our vertically integrated operations.

Distribution

Our sales network for retail distribution of oil products, fuel alcohol and natural gas consisted of 7,119 service stations in Brazil as of December 31, 2002 (as compared to 7,031 as of December 31, 2001), of which 602 are owned by BR, our subsidiary. BR's owned and franchised service station network represents approximately 25% of all of the service stations in Brazil, with approximately 42% of this network located in the populous and industrial Southeast region of the country.

BR also sells directly to commercial and industrial end-users. For the year ended December 31, 2002, BR had net operating revenues of U.S.\$ 6,562 million, of which 47.9% were generated from commercial and industrial sales and 52.1% from retail sales. In 2002, BR was the largest distributor of refined oil products and fuel alcohol in Brazil with a 32.9% market share (by volume of sales), which it achieved by leveraging its extensive sales network and BR's strong brand image. For the year ended December 31, 2002, 53.4% of BR's net operating revenues were generated from sales of diesel and fuel oil, which are traditionally sold to industrial customers, transportation companies and the Brazilian government.

Additionally, we maintain a distribution network consisting of 722 service stations in Argentina and 76 service stations in Bolivia. The results of these service stations are reflected in our international business segment.

Natural Gas and Power

Natural gas exploration and production, marketing and distribution is becoming an increasingly important part of our business as Brazil's energy needs grow. The Brazilian government has estimated that natural gas will represent 10% of primary energy consumption by 2005 and 12% by 2010. We intend to serve this potential growing demand primarily through:

the production of associated and non-associated natural gas from our domestic reserves, primarily Campos Basin; and

the production and importation by pipeline of non-associated natural gas from our reserves in Bolivia and, to a lesser extent, Argentina.

We currently own interests in 17 natural gas distribution companies. These companies have an effective monopoly in the geographic areas in which they operate and further our plan to vertically integrate our natural gas operations.

Our most significant natural gas project, amounting to approximately U.S.\$1,785 million in capital expenditures at December 31, 2002, is the Bolivia-Brazil pipeline, which connects Bolivia and Brazil's system of natural gas transportation pipelines and is designed to facilitate increased importation activities.

Investments in the power industry continue to be an important part of our business, although we have reduced our exposure to this sector, in light of decreased consumer demand for energy in Brazil. We have interests in 16 of the 39 gas-fired thermoelectric plants proposed or being built in Brazil under the PPT. We have (or have agreed to acquire) minority interests ranging from approximately 10% to 50% in 12 of these plants and majority interests in the remaining 4 plants.

During 2002, our total investments in thermoelectric power activities, including capital expenditures and capital commitments, totaled U.S.\$906 million.

International

The international segment of our business includes all of our activities outside of Brazil, including exploration and production, transportation, refining, distribution, natural gas and power. In 2002, approximately 2.7% of our net operating revenues were generated from international sales.

We began our international exploration and development activities in 1972, and we made our earliest discoveries onshore in Colombia in that year. We currently conduct significant oil and gas exploration activities in eight countries and production activities in five other countries, principally in South America, the Gulf of Mexico and West Africa. As of December 31, 2002, our capital expenditures for international exploration and development were U.S.\$224 million.

In 2002, we expanded our international operations through the acquisition of 58.62% of Perez Companc, 39.67% of Petrolera Perez Companc and 100% of Petrolera Santa Fe.

With the purchase of Perez Companc, we acquired participation interests in five refineries abroad, three of which are located in Argentina (Refisan, Refinor and Bahia Blanca) and two in Bolivia (one in Cochabamba and one in Santa Cruz). We also acquired 722 service stations in Argentina and 76 in Bolivia.

Our Competitive Strengths

We have a number of key strengths, including:

our dominant market position in the production, refining and transportation of crude oil and oil products in Brazil;

our reserve base and comparatively long reserve life;

our deepwater technological expertise;

our cost efficiencies created by our large scale operations combined with our vertical integration within each of our business segments;

our strong position in Brazil's potentially growing natural gas markets; and

our success in attracting international partners in all our activities.

Our dominant market position in the production, refining and transportation of crude oil and oil products in Brazil

Our legacy as Brazil's former sole supplier of crude oil and oil products has provided us with a fully developed operational infrastructure throughout Brazil and a large proved reserve base. Our long history, resources and established presence in Brazil permits us to compete effectively with other market participants and new entrants now that the Brazilian oil and gas industry has been deregulated. We operate all major development fields in Brazil and operate approximately 98.6% of the country's refining capacity. Our average domestic daily production of crude oil and NGL increased 12.3% in 2002, 10.2% in 2001 and 12.1% in 2000.

Our reserve base and comparatively long reserve life

As of December 31, 2002, we had estimated proved developed and undeveloped reserves of approximately 10.5 billion barrels of crude oil equivalent in Brazil and abroad. In addition, we have a substantial base of exploration acreage both in Brazil and abroad, which we are exploring by ourselves and with industry partners in order to continue to increase our reserves.

As of December 31, 2002, our proved reserves to production ratio was 17 years, as compared to an international industry average of 13 years.

We believe that our proved reserves will provide us with significant opportunities for:

sustaining and increasing production growth; and

controlling costs in the future as we achieve greater economies of scale.

Our deepwater technological expertise

While developing Brazil's offshore basins over the past 35 years, we have gained expertise in deepwater drilling, development and production techniques and technologies. We are currently in the process of developing technology to permit production from wells at water depths of up to 9842 feet (3,000 meters).

Our deepwater development and production expertise has allowed us to achieve high production volumes and reduced lifting costs (excluding government taxes and imports). Our aggregate average lifting cost for crude oil and natural gas products in Brazil for the year ended December 31, 2002 increased to U.S.\$ 7.0 per barrel of oil equivalent including government take from U.S.\$6.55 per barrel of oil equivalent including government take for the year ended December 31, 2001. Excluding government take, our lifting costs decreased to U.S.\$3.00 per barrel of oil equivalent for the year ended December 31, 2002, as compared to U.S.\$3.26 per barrel of oil equivalent for the year ended December 31, 2001.

Our cost efficiencies created by our large scale operations combined with our vertical integration within each of our business segments

As the dominant integrated crude oil and natural gas company in Brazil, we can be cost efficient as a result of:

the location of over 80% of our proved reserves in large, contiguous and highly productive fields in the offshore Campos Basin, which allows for the concentration of our operational infrastructure, thereby reducing our total costs of exploration, development and production;

the location of most of our refining capacity in the Southeast region, directly adjacent to the Campos Basin and situated within the country's most heavily populated and industrialized markets; and

the relative balance between our current production of 1.5 million barrels per day, our refining throughput of 1.6 million barrels per day and the Brazilian market total demand for hydrocarbon products of 1.7 million barrels per day as of December 2002.

We believe that these cost efficiencies created by our integration, our existing infrastructure and our balance allow us to compete effectively with other Brazilian producers and importers of oil products into the Brazilian market.

Our strong position in Brazil's potentially growing natural gas markets

We participate in most aspects of the Brazilian natural gas market. Because of the diversity of our natural gas operations, we believe that we are well-positioned to take advantage of the opportunity to meet potentially growing energy needs in Brazil through the use of natural gas. We intend to do so through our:

development of significant proved natural gas reserves in Bolivia and, to the extent possible, the signing of long-term agreements for the importation of natural gas from Bolivia to be sold to natural gas distribution companies in Brazil;

continued participation and investment in the 1,969 miles (3,150 kilometers) long Bolivia-Brazil natural gas pipeline, which has made possible the importation and distribution throughout Brazil of significant Bolivian gas reserves;

increasing production of non-associated natural gas and investing in the necessary processing facilities from our domestic fields;

planned investments in expansion of the natural gas transportation network throughout Brazil;

increased participation in the natural gas distribution market through investments in 17 of the 23 natural gas distribution companies in Brazil; and

development of thermoelectric power through investments in 16 of the 39 gas-fired thermoelectric plants proposed to be built in Brazil and agreements to purchase electricity from, and sell natural gas to, these plants under the PPT.

Our success in attracting international partners in all our activities

As a result of our experience, expertise and extensive infrastructure network in Brazil, we have attracted partners in our exploration, development, refining, and power activities such as Repsol-YPF, ExxonMobil, Shell, British Petroleum, Chevron-Texaco and Total. Partnering with other companies allows us to share risks, capital commitments and technology in our continuing development and expansion.

We may face significant risks in our ability to take full advantage of these competitive strengths. See Item 3 Key Information Risk Factors.

Our Business Strategy

We intend to continue to expand our oil and gas exploration and production activities and pursue strategic investments within and outside of Brazil to further develop our business. We seek to evolve from a dominant integrated oil and gas company in Brazil into an energy industry leader in Latin America and a significant international oil and gas company. In line with our Strategic Plan and to further these goals, we intend to:

expand production while increasing reserves;

upgrade our refineries to increase their ability to process heavier domestic crude oil production while at the same time fulfilling a growing percentage of the current demands of the Brazilian market and meeting stricter quality standards;

expand international operations through internal growth and by participating selectively in new partnerships in core activities where we have competitive advantages;

develop and improve systematic, company-wide initiatives to address environmental, health and safety concerns and ensure compliance with environmental regulations;

expand the natural gas market in Brazil to ensure a market for the natural gas that we produce or acquire through existing off-take obligations;

operate successfully and transparently in a deregulated market; and

meet targeted operating costs and return on capital.

Expand production while increasing reserves

We seek to generate production growth from the continued development of our proved undeveloped reserve base of 5.5 billion barrels of oil equivalent as of December 31, 2002, which represents approximately 53% of our total proved reserves. Our 2003-2007 budget contemplates capital expenditures of approximately R\$77 billion (U.S.\$22.4 billion) in development activities for this five-year period, including R\$5.6 billion (U.S.\$1.6 billion) to be financed through project financings. The majority of these capital expenditures, R\$62 billion (U.S.\$18 billion) will be directed towards domestic exploration and production activities.

At the same time that we seek to expand production, we intend to increase our proved reserves principally through an exploration program focused on deepwater exploration in Brazil. We have net exploration, development and production rights in 35.4 million acres (143,343 square kilometers) in

Brazil. We expect to continue to participate selectively with major regional and international oil and gas companies in bidding for new concessions and in developing our large offshore fields.

We also intend to pursue international exploration and production opportunities with industry participants primarily in the west coast of Africa, the Gulf of Mexico and South America. As a result of this strategy, we participate in joint ventures which have resulted in discoveries in Agbami and Akpo (off the coast of Nigeria) and in a deepwater field in the Gulf of Mexico (Cascade Project). We have exploration, development and production rights in 12.7 million (gross) and 5.0 million (net) acres (58,000 (gross) and 21,000 (net) square kilometers) outside Brazil.

Upgrade our refineries to increase their ability to process heavier domestic crude production while at the same time fulfilling a growing percentage of the current demands of the Brazilian market

Our refineries were originally constructed to process light imported crude oil, whereas our current reserves and production increasingly consists of heavier crude oil. We plan to improve and adapt our refineries to better process our domestic production by continuing to:

invest in our refineries to allow them to process greater volumes of heavier domestic crude oil, thereby reducing the amount of crude oil we have to import to meet demand;

invest in our refineries to produce the light and middle distillate products that are of higher value and greater demand in the Brazilian market;

seek to upgrade the technology of our refining operations to increase efficiency; and

improve the interconnection between our domestic and international activities to improve operating efficiencies.

Expand international operations through internal growth and by participating selectively in new partnerships in core areas where we have competitive advantages.

On October 17, 2002, we acquired a controlling interest in Perez Companac, and indirectly in its subsidiary Petrolera Perez Companac. With the Perez Companac acquisition, we have achieved our immediate targets with respect to international acquisitions. As a result, no further material acquisitions are planned during 2003. In the near term, we expect to expand internally by using our existing asset base, or participating in selective partnerships in core activities where we have a competitive advantage. We consider our core activities to be integrated oil and gas operations throughout South America, and deepwater exploration and development off the U.S. Gulf Coast and West Africa.

Develop and improve systematic, company-wide initiatives to address health, safety and environmental concerns and ensure compliance with environmental regulations

The protection of human health and the environment is one of our primary concerns, and is essential to our success as an integrated oil, gas and energy company. In order to address and prioritize health and safety concerns and ensure compliance with environmental regulations, we have taken several measures, the most extensive of which is the *Programa de Excelência em Gestão Ambiental e Segurança Operacional* (Environmental, Management and Operational Safety Excellence Program, or PEGASO), which has enabled us to achieve a new standard with respect to issues of safety and respect for the environment. See Health, Safety and Environmental Matters.

Expand the natural gas market in Brazil to ensure a market for the natural gas that we produce, or acquire through existing off take obligations.

Through our participation in all segments of the natural gas market, both in Brazil and abroad, we seek to stimulate and meet natural gas demand. We intend to continue to expand our participation in the natural gas market by:

expanding our production of associated gas offshore and exploiting our non-associated gas reserves in Bolivia and the Solimões basin;

expanding our extensive natural gas pipeline network to further connect our natural gas reserves with refineries and other primary distribution points throughout Brazil; and

maintaining investments in natural gas distribution and transportation companies.

As a result of our investments and the growing importance of natural gas as an energy alternative, we anticipate that the proportion of our revenues and the proportion of our assets represented by our natural gas operations will increase, leading to a greater impact of these activities on our results of operations.

Operate successfully and transparently in a deregulated market

Since the beginning of market liberalization and price deregulation in 1997, we have been taking steps to prepare for market competition. In order to meet the challenges of competition, we have:

conducted analyses of the actual and potential sources of competition in each of our business segments; and

planned to continue upgrading and modernizing our refineries to increase their capacity to refine heavy oil and improve the quality of the oil products we produce in order to compete with imports of oil products.

We continue the process of transforming our corporate culture and bylaws to encourage greater agility, transparency and accountability to shareholders. In March 2002, we amended our bylaws to comply with changes to the Brazilian Corporation Law and improve our corporate governance. We believe that these corporate changes better position us to compete in a deregulated market, increase investor confidence in our company and enhance our market value.

In addition to the changes we have implemented in our bylaws, we have adopted the following policies and procedures:

the Corporate Governance Guidelines, which establish procedures for our board of directors and set forth matters where the opinion of our preferred shareholders will be considered;

the Code of Good Practices, which institutes corporate policies relating to matters such as information disclosure, insider trading restrictions, management and professional behavior, selection of management of subsidiaries and affiliates and investor relations;

the Internal Regulation, which defines responsibilities and procedures governing the meetings of the board of directors, board committees, business committee and management committee; and

the Code of Ethics, which sets forth fundamental principles for business transparency and rules of ethical conduct.

We had hoped that these significant corporate governance initiatives would permit us to qualify for a higher level listing (Level 2) on the principal Brazilian stock exchange (Bovespa). Level 2 is a status reserved for companies that adhere to Bovespa's corporate governance measures and certain other requirements. One of the requirements for qualification for Level 2 listing is that we, our controlling shareholder and our directors and executive officers sign a contract with Bovespa pursuant to which they would agree to cause an amendment to our bylaws in order to entitle our preferred shareholders to vote on certain matters, such as conversions into other corporate forms, mergers, split-offs or split-ups and approvals of transactions between us and other companies in our corporate group. In this process, the Finance Ministry represents the Brazilian government, our controlling shareholder. The Attorney General of the Finance Ministry has refused to recommend that the Minister of Finance sign the contract with Bovespa on behalf of the Brazilian government, because he believes that such an amendment to our bylaws would negatively affect the power of the Brazilian government to control us and that, therefore, the Brazilian government is prohibited by law from consenting to such an amendment. As a result, the Minister of Finance did not sign the contract with Bovespa on behalf of the Brazilian government, and consequently Bovespa refused to grant us a higher listing. We remain committed to resolving these legal issues in order to eventually achieve a Level 2 listing on Bovespa.

Meet targeted operating costs and return on capital

We are undertaking a number of initiatives to control our operating costs. We are targeting a reduction in the aggregate average lifting costs in Brazil for crude oil and natural gas in order to achieve lifting costs of U.S.\$2.80 per barrel of oil equivalent in 2005 (excluding government take) as compared to U.S.\$3.0 per barrel of oil equivalent in 2002. We will seek to reduce our operating costs per barrel by a number of means, including:

expanding our exploration, development and production activities near our existing operations (which allows for the concentration of our operational infrastructure);

targeting a return on capital of 10% for 2005 and 12% for 2007, assuming a price of U.S.\$15 per barrel for Brent crude oil;

bringing additional developments onstream in large new offshore fields with high well productivity;

employing ongoing improvements in production techniques developed by us and by the drilling industry; and

increasing gas sales through the Bolivia-Brazil pipeline.

Exploration, Development and Production

Summary and Strategy

We participate in exploration, development and production activities throughout Brazil and, as of December 31, 2002, in 8 other countries (Angola, Argentina, Bolivia, Colombia, United States, Nigeria, Trinidad & Tobago and Equatorial Guinea), excluding Perez Compan's activities. We began domestic production in 1954 and international production in 1972. As of December 31, 2002, our estimated worldwide net proved crude oil and natural gas reserves were approximately 10.5 billion barrels of oil

equivalent. Crude oil represented 85% and natural gas represented 15% of these reserves. Our proved reserves are located principally in Brazil, in the Campos Basin.

During 2002, our average daily domestic production was 1.5 million barrels per day of oil and NGLs and 1.5 billion cubic feet of natural gas per day, compared to an average daily international production of approximately 35 thousand barrels per day of crude oil and NGLs and 138 million cubic feet of natural gas per day. Our aggregate average lifting costs for crude oil and natural gas in 2002 were U.S.\$ 3.0 per barrel of oil equivalent in Brazil (excluding government take) and U.S.\$ 2.08 per barrel of oil equivalent abroad.

We conduct our exploration, development and production activities in Brazil through concession contracts. Under the terms of the Oil Law, in 1998 we were granted the concession rights to areas where we were already producing or could demonstrate we could explore or develop within a certain time frame. In a number of our concessions, we have agreed with foreign partners to jointly explore and develop the concessions. In conjunction with the majority of these arrangements, we received a carried interest for capital expenditures made during the exploration phase, with our partners incurring all capital expenditures until the development of a commercial discovery commences.

As of December 31, 2002, we held 327 areas, representing 35.4 million acres (143,259 square kilometers). We currently have joint venture agreements for exploration and production in Brazil with approximately 20 foreign and domestic companies. We are also active in exploration and production activities outside Brazil. For a full description of our international activities, see International Exploration and Production. In addition, we have added to our exploration acreage through our participation in bidding rounds that have been conducted annually by the *Agência Nacional de Petróleo* (the National Petroleum Agency, or the ANP) since 1999.

Our main strategies in exploration, development and production in Brazil are to:

- increase production by developing our proved reserves, mainly by focusing on deepwater offshore activities;

- increase reserves through continued exploration;

- reduce lifting costs; and

- continue to take advantage of opportunities to acquire exploration concessions in Brazil.

Our exploration, development and production results are reflected in the Exploration and Production segment in our audited consolidated financial statements.

Principal Domestic Oil and Gas Producing Regions

The earliest discoveries of hydrocarbons in Brazil were made in the State of Bahia by the *Conselho Nacional do Petróleo* (Brazilian Oil Council, or CNP), between 1939 and 1954. Following the discoveries by CNP, we were created and began domestic exploration and production in 1954. Our first discoveries were made onshore in the States of Bahia, Alagoas and Sergipe in the 1950s and 1960s. In the 1970s, we made major offshore discoveries in shallow waters off the coast of the States of Rio Grande do Norte, Ceará and Rio de Janeiro. In the mid-1980s, we discovered the deepwater reservoirs in the Campos Basin off the coast of the State of Rio de Janeiro, and further exploration culminated with the deepwater discovery of the Roncador field in 1996.

Our progress can be seen in the growth of our annual daily production. In 1970, we produced 167 Mbpd of crude oil, condensate and natural gas liquids in Brazil. We increased production to 188 Mbpd in 1980, 654 Mbpd in 1990, 1,271 Mbpd in 2000 and 1,336 Mbpd in 2001. New platforms, along with high production efficiency of our platforms in the Campos Basin, enabled us to attain average production of 1,500 Mbpd in 2002. In February 2003, we achieved a new record in the monthly output of crude oil and NGL in Brazil, producing an average of 1,597 thousand barrels per day.

Campos Basin

The successful discovery and development of the oil fields in the Campos Basin marked a critical breakthrough in our history and that of the Brazilian oil and gas industry. The Campos Basin is our largest oil and gas producing region, and covers approximately 28.4 million acres (115 thousand square kilometers). Since exploration activities in the Campos Basin began in 1968, over 40 hydrocarbon reservoirs have been discovered in this region, including eight large oil fields in deepwater and ultra deepwater. In terms of proved hydrocarbon reserves and annual production, the Campos Basin is the largest oil basin in Brazil and one of the most prolific oil and gas areas in South America. Annual crude

oil production volume in the region has steadily increased for the past ten years and reached 1,218 thousand barrels per day in 2002, which accounted for approximately 81% of Brazilian oil production.

As of December 31, 2002, we produced crude oil from 35 fields in the Campos Basin. As of December 31, 2002, our proved crude oil reserves in the Campos Basin were 7.8 billion barrels, representing 89% of our total proved crude oil reserves. In 2002, the crude oil we produced in the Campos Basin had an average API gravity of 22.8° and an average water cut of 32%. We currently have 24 floating production systems, 13 fixed platforms and 4,225 kilometers of pipeline operating in 35 fields at water depths of 262 to 6,106 feet (80 to 1,861 meters) in the Campos Basin.

Santos Basin

The Santos Basin represents one of our most active and promising exploration areas. We currently have exploration rights to 14 blocks in the Santos Basin, with a combined acreage of 43.8 thousand square kilometers (as compared to 29.8 thousand square kilometers under concession in the Campos Basin). Current production is 2.5 Mboe per day of crude oil in the Caravelas and Merluza fields.

Espírito Santo Basin

In partnership with Shell and Chevron Texaco, we made several discoveries of heavy crude oil in the Espírito Santo Basin, but it is still unclear whether this crude oil is commercially recoverable. During 2002, we produced 24.9 Mboe per day of crude oil in the Espírito Santo Basin (mostly onshore).

Solimões Basin

The Solimões Basin is primarily a natural gas producing region which covers approximately 235 million acres (950,000 square kilometers) in the Amazon region. During 2002, we produced 55.7 Mboe per day of crude oil in the Solimões Basin.

Properties

The following table sets forth our developed and undeveloped acreage by oil region and associated crude oil and natural gas production:

	Production Acreage as of December 31, 2002		Average Oil and Natural Gas Production for the Year	Average Oil and Natural Gas Production for the Year
	Developed	Undeveloped	Ended December 31, 2002 ⁽¹⁾⁽³⁾	Ended December 31, 2001 ⁽¹⁾⁽³⁾
	(in acres)		(boe per day) ⁽²⁾	
Brazil⁽¹⁾				
Offshore				
Campos Basin	1,713,862	44,972	1,329,717	1,152,745
Other offshore	313,566	86,978	78,052	80,661
Total offshore	2,027,428	131,950	1,407,769	1,233,406
Onshore	979,491	122,807	344,158	334,501
Total Brazil	3,006,919	254,757	1,751,927	1,567,907
International	566,368	216,014	58,171	68,391
Total	3,573,287	470,771	1,810,098	1,636,298

(1) Over 90% of our production of natural gas is associated gas.

(2) See Conversion Table for the ratios used to convert cubic feet of natural gas to barrels of oil equivalent.

(3) Includes production from shale oil reserves, natural gas liquids and reinjected gas volumes, which are not included in our proved reserves figures.

Deepwater Expertise

We are a leader in deepwater drilling, with recognized expertise in deepwater exploration, development and production. In recognition of our deepwater drilling achievements, the Offshore Technology Conference awarded us the OTC Prize in 2001. We have developed our expertise over many years and have achieved significant milestones, including the following:

in April 1994, we produced crude oil for the first time below a water depth of 3,281 feet (1,000 meters), and achieved a world record for depth of sub-sea completions by bringing into production a well in waters 3,369 feet (1,027 meters) deep;

on January 25, 1999, we completed the world's deepest offshore producing well located at Roncador field, at 6,079 feet (1,853 meters) water depth, which we surpassed in June 2000 with a producing well at 6,157 feet (1,877 meters) water depth;

in 2000, we confirmed the discovery of crude oil at a depth of 7,359 feet (2,243 meters) in the Campos Basin, achieving a new record for our deepwater exploration;

at the end of August 2001, we drilled the world's second deepwater multi-lateral well (having drilled the first such well in August 1998), in the Barracuda-Caratinga field in the Campos Basin at a water depth of 2,815 feet (858 meters), consisting of two legs with 1,782 feet (543 meters), and 1,345 feet (410 meters) of horizontal displacement;

at December 31, 2002, we were operating 26 wells at water depths in excess of 3,281 feet (1,000 meters); and

at December 31, 2002, we had drilled 185 wells in water depth greater than 3,281 feet (1,000 meters), the deepest well being in water depth of 9,360 feet (2,853 meters), making it the third deepest offshore exploratory well in the world.

Because many of Brazil's richest oil fields are located offshore in deep waters, we intend to continue to focus on our deepwater production technology to increase our proved reserves and future domestic production. See Item 5 Operating and Financial Review and Prospects Research and Development. Our main exploration and development efforts involve offshore fields neighboring our existing fields and production infrastructure, where higher drilling costs have been offset by higher drilling success ratios and relatively higher production. On a per-well basis, the exploration, development and production costs of an offshore well are generally higher than those costs for an onshore well. We believe, however, that offshore production is cost-effective, because historically:

we have been more successful in drilling offshore, as a result of the existence of a larger number of oil reservoirs offshore rather than onshore and the greater volume of offshore seismic data collected; and

we have been able to spread the total costs of exploration, development and production over a large base, given the size and productivity of our offshore reserves. Offshore production has exceeded onshore production by a per barrel production ratio of 5.18:1 in 2002, 4.79:1 in 2001 and 4.83:1 in 2000.

We currently extract hydrocarbons from offshore wells in waters with depths of up to 6,165 feet (1,879 meters), and we have been developing technology to permit production from wells at water depths of up to 9,843 feet (3,000 meters). Set forth below is the distribution, by water depth, of offshore oil production in 2002 and 2001.

OFFSHORE PRODUCTION BY WATER DEPTH

Depth	Percentage in 2002	Percentage in 2001
0-400 meters (0-1,312 feet)	20%	23%
400-1,000 meters (1,312 feet-3,281 feet)	67%	68%
More than 1,000 meters (3,281 feet)	13%	9%

Exploration Activities

Our Concessions in Brazil

Prior to 1998, we had the right to exploit all exploration, development and production areas in Brazil as a result of the monopoly that was granted to us by the Brazilian government. When the Brazilian oil and gas sector was deregulated beginning in 1998, our government-granted monopoly ended. On August 6, 1998, we signed concession contracts with the ANP for all of the areas we had been using prior to 1998. Those concession contracts covered 397 areas, consisting of 231 production areas, 115 exploration areas and 51 development areas, for a total area aggregating 113.3 million gross acres (458,532 square kilometers).

As of December 31, 2002, we had 327 areas, consisting of 235 production areas, 58 exploration areas and 34 development areas, for a total area aggregating 35.4 million net acres (143.3 thousand square kilometers). This total area represents 2.3% of the Brazilian sedimentary basins.

Exploration bidding rounds

Since 1998, the ANP has conducted bidding rounds for exploration rights which are open to us and qualified third parties. We have competed in the public auctions conducted by the ANP, acquiring a large number of exploration rights, as detailed in the table below. We have also relinquished a considerable number of the exploratory areas in which we were not interested or successful in exploring.

We have participated in the first, second, third and fourth auctions for exploration rights conducted by the ANP.

The first public auction of oil exploration areas was held on June 15 and 16, 1999. Of the 27 offered exploratory blocks, covering a total area aggregating approximately 32.7 million acres (132,176 square kilometers), 15 were acquired by bidders. We acquired exploration rights in five exploratory blocks for a total investment of approximately U.S.\$8 million.

The second public auction of oil exploration areas was held on June 7, 2000. Of the 23 offered exploratory blocks, covering a total area aggregating approximately 14.3 million acres (57,800 square kilometers), 22 were acquired by bidders. We acquired exploration rights in eight exploratory blocks for a total investment of approximately U.S.\$91.5 million.

The third public auction of oil exploration areas was held on June 19 and 20, 2001. Of the 53 offered exploratory blocks covering a total area aggregating approximately 22.2 million acres (89,800 square kilometers), 34 were acquired by bidders. We acquired exploration rights in fifteen exploratory blocks for a total investment of approximately U.S.\$33.3 million.

The fourth public auction of oil exploration areas was held on June 19 and 20, 2002. Of the 55 offered exploratory blocks covering a total area aggregating approximately 36 million acres (145,000 square kilometers), 21 were acquired by bidders. We acquired exploration rights in eight exploratory blocks for a total investment of approximately U.S.\$7.4 million.

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The following chart summarizes our success in the exploration bidding rounds conducted by the ANP, as described above:

	Activity			
	Exploration	Development	Production	Total
Areas requested (October 13, 1997)	133	52	240	425
Concessions granted (August 6, 1998)	115	51	231	397
Areas relinquished (May 11, 1999)	(26)	0	0	(26)
Areas redefined		(5)	5	
	89	46	236	371
Areas held (June 1, 1999)	89	46	236	371
Areas won on Bid, Round 1	5	0	0	5
Areas redefined		(5)	5	
New concessions (July 1, 1999)	0	0	1	1
Areas relinquished (January 26, 2000)	(3)	0	0	(3)
Areas won on Bid, Round 2	8	0	0	8
	99	41	242	382
Areas held (December 31, 2000)	99	41	242	382
New concession (March 21, 2001) (Angico)		1		1
Areas sold (May 10 and 11, 2001)	0	(3)	(10)	(13)
Areas won on Bid, Round 3	15			15
New concession (August 1, 2001) (Curió)		1		1
New concession (August 2, 2001) (Beija Flor)		1		1
Area redefined (August 6, 2001) (Curió)		(1)	1	
Areas relinquished (August 6, 2001)	(58)			(58)
Areas relinquished (October 5, 2001) (BC-8)	(1)			(1)
New concession (November 5, 2001) (Cardeal)		1		1
Areas relinquished (December 12, 2001) (BC-9)	(1)			(1)
Areas redefined (December 18, 2001) (Pojuca Norte)		(1)	1	
	54	40	234	328
Areas held (December 31, 2001)	54	40	234	328
Areas won on Bid, Round 4	8			8
New concession (concession partially acquired)	1			1
Areas relinquished (May/September 2002)	(5)			(5)
New discoveries		4		4
Areas redefined		(6)	6	
Areas relinquished		(4)	(5)	(9)
	58	34	235	327
Total areas held (as of December 31, 2002)	58	34	235	327
Net land area held in acres (as of December 31, 2002)	32,158,335	246,359	2,983,238	35,387,932

Joint Ventures

As of December 31, 2002, we had 43 exploration and development agreements with respect to our concessions with numerous oil and gas companies. Our percentage participation ranges from 20% to 85%, and in 22 of the 43 agreements, we are principally responsible for conducting the exploration and development activities. During 2002, we entered into 5 partnership projects relating to exploration activities. As of December 31, 2002, we had partnerships with 20 foreign and domestic companies.

We have sought to maximize our exploratory acreage and reduce our costs and risks of exploration and development activities. In conjunction with the majority of these arrangements, we receive a carried interest for capital expenditures made during the exploration phase, with our partners incurring all capital expenditures until the development of a commercial discovery commences.

Recent Exploration Activities

Our exploration activities during the period from 1999 through 2002 led to many discoveries. The most important were:

the first natural gas discovery with commercial potential in the Amazon Basin (block BA-3) (1999);

the discovery of light crude oil in the Sergipe-Alagoas Basin both in shallow and deep water (SEAL-100 block) (2001);

the offshore discoveries of natural gas and crude oil in the Camamu Basin, off the coast of Bahia State (former block BCAM-40) (2000 and 2001);

the discoveries of onshore crude oil in Espírito Santo and of natural gas in the coast of Espírito Santo (in the former BFRD exploration block, Cangoa-Peroá and Fragata fields) (1997, 1998, 1999, 2000 and 2001);

the discovery of crude oil at a depth of 7,359 feet (2,243 meters) in the Campos Basin, a new record for our deepwater exploration (block BC-600) (2000);

the discoveries of heavy crude oil in the Campos Basin (block BC-10, which is operated by Shell in partnership with us and Esso) and the Santos Basin (block BS-4, operated by Shell in partnership with us and Texaco) (2001 and 2002);

the discovery of light crude oil and natural gas in the Santos Basin off the coast of Paraná State (block BS-3, operated by us in partnership with Q.Galvão, Coplex and Starfish) (2001 and 2002);

the discoveries of heavy crude oil and gas off the coast of Rio de Janeiro State (block BS-500) (1999, 2000, 2001 and 2002); and

the discoveries of the Jubarte and Cachalote fields off the coast of Espírito Santo State, which has led to the establishment of important petroleum activities in that region (block BC-60) (2001 and 2002).

Drilling Activities

During 2002, we drilled a total of 277 development wells and 56 exploratory wells. Of those wells, 20 development wells and 19 exploratory wells were located in our principal Campos Basin fields. Of those development wells, 40% were drilled in the Marlim field, with the remainder concentrated in the Roncador, Barracuda, Albacora, Espadarte, Voador, Marimbá and Marlim Sul fields. An additional 99 of the 319 new development wells we plan to drill during 2003 will be drilled in the Campos Basin, primarily in the Roncador, Marlim, Barracuda, Espadarte, Voador, Marimbá and Marlim Sul fields.

We plan to expand our exploration and development activities in 2003 by:

drilling approximately 65 new exploratory and approximately 319 new development wells;

shooting and processing two-dimensional and three-dimensional seismic surveys; and

constructing onshore and offshore production and support facilities.

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The following table sets forth the number of wells we drilled, or in which we participated, and the results achieved, for the periods indicated:

EXPLORATORY AND DEVELOPMENT WELLS

Period		Brazil				Total
		Offshore				
		Campos Basin	Other	Onshore	International	
2002	Net Exploratory Wells Drilled	19	21	16	4	60
	Successful	4	2	5	3	14
	Unsuccessful	15	19	11	1	46
	Net Development Wells Drilled	20	10	247	7	284
	Successful	20	10	238	7	275
	Unsuccessful	0	0	9	0	9
2001	Net Exploratory Wells Drilled	14	37	36	6	93
	Successful	4	6	9	3	22
	Unsuccessful	10	31	27	3	71
	Net Development Wells Drilled	41	9	294	11	355
	Successful	40	5	283	11	339
	Unsuccessful	1	4	11	0	16
2000	Net Exploratory Wells Drilled	17	12	20	7	56
	Successful	1	1	7	4	13
	Unsuccessful	16	11	13	3	43
	Net Development Wells Drilled	24	4	153	9	190
	Successful	24	2	145	9	180
	Unsuccessful	0	2	8	0	10

The following table sets forth our total fleet of drilling rig units. We will use these owned and leased rigs to support our future exploration, production and development activities. Most of the offshore rigs are operated in the Campos Basin.

DRILLING UNITS

	2002		2001		2000	
	Brazil	Int'l	Brazil	Int'l	Brazil	Int'l
Land rigs for onshore exploration and development	16	4	42	0	16	0
Owned	12	0	17	0	12	0
Leased	4	4	25	0	4	0
Semi-submersible rigs	20	0	22	22	20	22
Owned	4	0	4	13	4	13
Leased	16	0	18	9	16	9

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Drill ships	5	0	11	0	13	0
	—	—	—	—	—	—
Owned	4	0	0	0	0	0
Leased	1	0	11	0	13	0
Jack-up rigs	5	0	6	1	5	1
	—	—	—	—	—	—
Owned	5	0	4	1	4	1
Leased	0	0	2	0	1	0
Moduled rigs for offshore exploration and development	4	0	10	6	5	5
	—	—	—	—	—	—
Owned	4	0	7	0	4	0
Leased	0	0	3	6	1	5
	—	—	—	—	—	—
Total	50	4	91	29	59	28
	—	—	—	—	—	—

Development Activities

The development stage occurs after the completion of exploration and appraisal and prior to hydrocarbon production, and involves the development of production facilities including platforms and pipelines. We have an active development program in existing fields and in the discovery and recovery of new reserve finds. Over the last four years, we have concentrated our development investments in the deepwater fields located in the Campos Basin, where most of our proved reserves are located. We develop our fields in stages of production, which we refer to as modules.

Campos Basin Fields

Marlim. The Marlim field is located at water depths between 2,133 and 3,445 feet (650 – 1,050 meters). It is our largest field based on production. Average production of crude oil during 2002 was 602 Mbd, or more than 49% of total production in the Campos Basin. We have developed the Marlim field in five modules. We currently have seven floating production systems with a total capacity of 817 Mbd operating in the Marlim field. We have a total of 83 production wells and 45 injection wells, and expect to drill another four wells in 2003. Peak production of 602 Mboe was achieved in 2002.

Roncador. The Roncador field is located at water depths between 4,921 and 6,234 feet (1,500 – 1,900 meters). The first module of the development of this field consisted of Platform P-36, which sank in March 2001, and which was producing 80 Mbd prior to the accident. Since the loss of P-36, we have contracted a temporary Floating Production Storage and Offloading (FPSO) unit with a capacity of 90 Mbd. First oil from this unit was attained on December 8, 2002. A total of eight wells, which were previously attached to P-36, are currently being attached to the new FPSO unit.

A new permanent unit to replace P-36 is being planned, with production of first oil from the unit expected in 2006. Planned capacity is 180 Mbpd. The production unit consists of an FPSO, P-54. A total of 20 production wells are planned in this first module, including the eight which were completed before the sinking of P-36.

A second production unit is also being planned, with production of first oil also expected in 2006. Planned capacity is 190 Mbpd. The production unit consists of an FPSO (P-54). A total of ten production wells are planned.

Marlim Sul (South Marlim). The Marlim Sul field is located at water depths between 2,789 and 7,874 feet (850 – 2,400 meters). Production of crude oil began on December 17, 2001. In 2002, the average production for Marlim Sul was 152 Mbpd. We plan to develop the Marlim Sul field in two modules. The first module includes a production system consisting of a semi-submersible platform (P-40) and an FPSO unit and has a total capacity of 255 Mbpd. Nine wells are currently producing through P-40, out of a total of 16 planned production wells and ten injection wells.

A second module is also being planned, with production of first oil expected in 2006. Planned capacity is 180 Mbpd. The production system consists of an FPSO unit and is currently under evaluation. A total of 14 production wells and ten injection wells are planned.

Barracuda and Caratinga. The Barracuda and Caratinga fields are located at water depths between 2,274 and 3,899 feet (700 – 1,200 meters). Production of first oil is expected by the end of 2004. Two FPSO units are currently being constructed, one in Singapore (P-43, which will be installed in the Barracuda field) and one in Brazil (P-48, which will be installed in the Caratinga field). Each FPSO unit has a capacity of 150 Mbpd. A total of 32 production wells and 22 injection wells are planned for the two fields.

Albacora Leste (East Albacora). Albacora Leste is located at water depths between 3,609 and 4,921 feet (1,100 – 1,500 meters). First oil is expected in 2004. An FPSO unit (P-50) with a capacity of 180 Mbpd is currently being converted in Singapore. A total of 18 horizontal wells and 11 injection wells are planned. We are the operator and Repsol YPF is a partner with a 10% interest.

Other Planned Developments

Other developments include the Frade field, which is being developed in partnership with Chevron Texaco and the Bijupirá Salema field, which is being developed by Shell.

Some of these fields are being financed through project financings. See Item 5 – Operating and Financial Review and Prospects – Liquidity and Capital Resources – Project Finance and Off Balance Sheet Arrangements – Project Finance.

Platforms P-51 and P-52

We are planning to construct two new semi-submersible platforms, P-51 and P-52, with an expected total capacity of 360 Mbpd, which will be installed in the Campos Basin.

On February 25, 2003, our executive board approved a revision to the bidding and contractual requirements of the invitations to bid for the construction of the P-51 and P-52 platforms, in order to include a minimum required level of participation by Brazilian companies. The new requirements provide, among other things, that:

engineering, construction and assembly of the compression and generation modules is to take place entirely in Brazil, with a minimum local content of 75% of the value of the specifications, excluding the compressor motors and turbines; and

engineering, construction and assembly of the Topsides and integration with the finished unit is to be performed entirely in Brazil, with a minimum local content of 60% of the value of the Topsides contract specifications.

Our Strategic Plan for 2003 to 2007 contemplates greater participation by Brazilian companies in our domestic construction activities and other projects. We estimate that of the U.S.\$29.2 billion in domestic capital expenditures contemplated in our Strategic Plan for 2003 to 2007, at least U.S.\$18.9 billion (65%) will be utilized to pay for equipment and services provided by Brazilian contractors, suppliers and other similar service providers.

Production Activities

Our domestic crude oil and natural gas production activities involve fields located on Brazil's continental shelf off the coast of nine Brazilian states, of which the Campos Basin is the most important area, and onshore in seven Brazilian states. We are also producing crude oil and natural gas in five other countries: Angola, Argentina, Bolivia, Colombia and the United States. See International.

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The following table sets forth our average daily crude oil and natural gas production, our average sales price and our average lifting costs for each of the years ended December 31, 2002, 2001 and 2000:

	For the Year Ended December 31,		
	2002	2001	2000
Crude Oil and NGL Production (in Mbpd)⁽¹⁾			
Brazil			
Offshore			
Campos Basin	1,217	1,053	992
Other	40	44	49
Total offshore	1,257	1,097	1,041
Onshore	243	239	230
Total Brazil	1,500	1,336	1,271
International	35	43	53
Total crude oil and NGL production	1,535	1,379	1,324
Crude Oil and NGL Average Sales Price (U.S. dollars per Bbl)			
Brazil	\$ 22.30	\$ 19.89	\$ 26.07
International	23.00	22.32	26.37
Natural Gas Production (in Mmcfpd)⁽²⁾			
Brazil			
Offshore			
Campos Basin	690	601	576
Other	213	219	228
Total offshore	903	820	804
Onshore	609	572	522
Total Brazil	1,512	1,392	1,326
International	138	150	126
Total natural gas production	1,650	1,542	1,452
Natural Gas Average Sales Price (U.S. dollars per Mcf)			
Brazil	\$ 1.22	\$ 1.39	\$ 1.49
International	1.34	2.35	2.29
Aggregate Average Lifting Costs (oil and natural gas) (U.S. dollars per boe)			
Brazil ⁽³⁾	7.04	\$ 6.51	\$ 7.05
International	2.08	2.58	2.61

(1) Includes production from shale oil reserves and natural gas liquids, which are not included in our proved reserves figures.

(2) Includes reinjected gas volumes, which are not included in our proved reserves figures.

(3) Includes Brazilian government take.

Our increased offshore production over the three years ended December 31, 2002 was primarily attributable to our discovery and development of fields on the continental shelf off the coast of Rio de Janeiro in the Campos Basin. Increased average daily natural gas production was principally attributable to growth in the volume of associated gas recovered from the same fields.

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Average Brazilian production of crude oil and NGL for the year ended December 31, 2002 increased 12% relative to 2001, reaching 1.5 million barrels per day, principally as a result of:

the interconnection of new wells to the production platforms located in the Marlim Sul, Marlim, Albacora and Espadarte fields;

the initiation of production in the Seillean unit located in the Jubarte field, off the Coast of Espírito Santo; and

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the resumption of production from the Roncador field as a result of bringing the new FPSO Brazil platform online.

Reserves

Our estimated worldwide proved reserves of crude oil and natural gas as of December 31, 2002 totaled approximately:

8,955 billion barrels of crude oil and NGLs; and

approximately 9,473 billion cubic feet of natural gas.

We calculate reserves based on forecasts of field production, which depend on a number of technical parameters, such as seismic interpretation, geological maps, well tests and economic data. All reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of this data. Therefore, the reliability of reserve estimates depends on factors that are beyond our control and many of which may prove to be incorrect over time.

As of December 31, 2002, our proved developed crude oil reserves represented 47% of our total proved crude oil reserves. Our proved developed natural gas reserves represented 63% of our total proved developed natural gas reserves. Total proved hydrocarbon reserves on a barrel of oil equivalent basis increased at a compounded annual growth rate of 2.7% from the end of 1997 to 10.5 billion barrels of oil equivalent at the end of 2002. Natural gas as a percentage of total proved hydrocarbon reserves increased from 12% to 15% over the same period, representing an increase in volume from 8,440 billion cubic feet in 2000 to 9,473 billion cubic feet at the end of 2002.

In 2002, our reserves increased to 10.5 billion barrels of oil equivalent from 9.3 billion barrels of oil equivalent in 2001. This increase was a result of:

eight new discoveries of reserves, of which the most important were located in the Jubarte and Cachalote fields;

new accumulations in existing fields, principally Espadarte and Albacora;

the extension of proved areas in existing fields, principally Marlim Sul and Roncador; and

revisions to reserve estimates in producing fields.

Ninety percent of our gross domestic reserves estimates as of December 31, 2002 were reviewed and certified by DeGolyer and MacNaughton, or D&M. The estimates for the certification were performed in accordance with the rules and regulations of the SEC.

D&M's estimate of our gross domestic reserves for 2002 was approximately 3% lower than our estimate, even though D&M used the same technical criteria for the analysis of the reserves that we use. The main reason for the difference between these estimates is the differing interpretations of technical data. D&M has informed us that it is of the view that although it found both positive and negative differences in reserve estimates for individual properties in 2002, overall differences between our estimates and the estimates of D&M, when compared on the basis of gross domestic reserves, are not material.

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The following table sets forth our own estimated net proved developed and undeveloped reserves and net proved developed reserves of crude oil and natural gas as of December 31, 2002, 2001 and 2000 and as of January 1, 2000.

WORLDWIDE ESTIMATED NET PROVED RESERVES

	Brazil			International			Combined Global Proved Reserves
	Natural		Combined ⁽²⁾	Natural		Combined ⁽²⁾	
	Crude Oil	Gas ⁽¹⁾		Crude Oil	Gas ⁽¹⁾		
	(MMbbl)	(Bcf)	(MMboe)	(MMbbl)	(Bcf)	(MMboe)	(MMboe)
Net Proved Developed and Undeveloped Reserves:							
Reserves at January 1, 2000	8,155.4	6,860.8	9,377.6	123.1	637.6	229.4	9,607.0
Revisions of previous estimates	610.3	(182.9)	501.2	7.8	1,574.2	270.2	771.4
Extensions, discoveries and improved recovery	0.0	2.4	0.4	14.3	0.3	14.3	14.7
Purchase of reserves in place	0.0	0.0	0.0	1.5	0.0	1.5	1.5
Sales of reserves in place	(91.3)	(18.3)	(94.4)	0.0	0.0	0.0	(94.4)
Production for the year	(447.0)	(395.2)	(512.9)	(17.8)	(38.9)	(24.3)	(537.2)
Reserves as of December 31, 2000	8,227.4	6,266.8	9,271.9	128.9	2,173.2	491.1	9,763.0
Revisions of previous estimates	(949.6)	401.1	(882.7)	(0.3)	13.0	1.9	(880.8)
Extensions, discoveries and improved recovery	877.6	835.3	1,016.7	2.2	65.5	13.1	1,029.8
Sales of reserves in place	(31.6)	(194.0)	(63.9)	(20.2)	(38.8)	(26.6)	(90.5)
Production for the year	(471.0)	(423.9)	(541.6)	(14.6)	(50.7)	(23.0)	(564.6)
Reserves as of December 31, 2001	7,652.8	6,885.3	8,800.4	96.0	2,162.2	456.5	9,256.9
Revisions of previous estimates ⁽³⁾	822.0	787.0	953.0	3.1	(49.8)	(5.3)	947.7
Extensions, discoveries and improved recovery	888.2	102.2	905.1	10.8	9.2	12.3	917.4
Sales of reserves in place	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of reserves in place	0.0	0.0	0.0	23.6	71.5	35.5	35.5
Production for the year	(529.8)	(446.7)	(604.2)	(11.8)	(48.1)	(19.8)	(624.0)
Reserves as of December 31, 2002	8,833.2	7,327.8	10,054.3	121.7	2,145.0	479.2	10,533.5
Net Proved Developed Reserves:							
As of January 1, 2000	3,181.5	3,604.6	3,823.5	80.4	349.0	138.6	3,962.1
As of December 31, 2000	3,780.8	3,614.3	4,383.2	80.1	1,368.4	308.2	4,691.4
As of December 31, 2001	3,899.4	3,946.0	4,557.1	66.6	1,336.8	289.4	4,846.5
As of December 31, 2002	3,912.9	3,892.5	4,561.7	94.7	2,043.9	435.4	4,997.1

- (1) Natural gas liquids are extracted and recovered at natural gas processing plants downstream from the field. The volumes presented for natural gas reserves are prior to the extraction of natural gas liquids.
- (2) See Conversion Table for the ratios used to convert cubic feet of natural gas to barrels of crude oil equivalent. Production of shale oil and associated reserves are not included.
- (3) The revisions of previous estimates are largely attributable to changes in the year-end price of crude oil, which could affect the amount of commercially recoverable reserves. Additionally, for the year ended December 31, 2001, a reduction of 181 MMbbl of crude oil equivalent occurred as a result of shifting part of the Roncador production beyond the concession period ending 2027, since the SEC only permits the inclusion of reserves for which there is a legal right to produce.

The following tables set forth our crude oil and natural gas proved reserves by region, as of December 31, 2002, 2001 and 2000:

CRUDE OIL NET PROVED RESERVES BY REGION

	As of December 31,					
	2002		2001		2000	
	Proved Developed and Undeveloped	Proved Developed	Proved Developed and Undeveloped	Proved Developed	Proved Developed and Undeveloped	Proved Developed
	(MMbbl)					
Brazil						
Offshore						
Campos Basin	7,829.8	2,742.5	6,656.4	3,131.5	7,210.2	3,015.4
Other	162.8	498.5	169.9	117.3	199.2	124.3
Total offshore	7,992.6	3,241.0	6,826.3	3,248.8	7,409.4	3,139.7
Onshore	840.7	671.9	826.5	650.6	818.0	641.1
Total Brazil	8,833.2	3,912.9	7,652.8	3,899.4	8,227.4	3,780.8
International						
Other South America ⁽¹⁾	99.4	72.8	66.8	45.1	71.7	42.9
West Coast of Africa	19.1	19.1	26.0	18.2	31.4	24.6
Gulf of Mexico	3.1	2.8	3.2	3.2	5.0	5.0
North Sea ⁽²⁾	0.0	0.0	0.0	0.0	20.8	7.6
Total international	121.7	94.7	96.0	66.6	128.9	80.1
Total	8,955.0	4,007.6	7,748.8	3,966.0	8,356.3	3,860.9

(1) Includes Argentina, Bolivia and Colombia.

(2) We sold our interest in 2001.

NATURAL GAS NET PROVED RESERVES BY REGION

	As of December 31,					
	2002		2001		2000	
	Proved Developed and Undeveloped	Proved Developed	Proved Developed and Undeveloped	Proved Developed	Proved Developed and Undeveloped	Proved Developed
	(Bcf)					
Brazil						
Offshore						
Campos Basin	4,147.2	1,529.4	3,644.3	1,696.4	2,504.7	988.1
Other	1,372.8	880.5	1,214.8	802.7	1,218.8	877.7
Total offshore	5,520.0	2,409.9	4,859.1	2,499.1	3,723.5	1,865.8
Onshore	1,807.8	1,482.6	2,026.1	1,446.9	2,543.3	1,748.5
Total Brazil	7,327.8	3,892.5	6,885.3	3,946.0	6,266.8	3,614.3
International						
Other South America ⁽¹⁾	2,092.0	2,001.9	2,104.7	1,279.2	2,081.4	1,278.7
West Coast of Africa	0.0	0.0	0.0	0.0	0.0	0.0
Gulf of Mexico	53.1	42.0	57.6	57.6	56.8	56.8
North Sea ⁽²⁾	0.0	0.0	0.0	0.0	35.0	32.9
Total international	2,145.0	2,043.9	2,162.2	1,336.8	2,173.2	1,368.4
Total	9,472.9	5,936.4	9,047.5	5,282.8	8,440.0	4,982.7

(1) Includes Argentina, Bolivia and Colombia.

(2) We sold our interest in 2001.

Refining, Transportation and Marketing

Summary and Strategy

We own and operate 11 refineries in Brazil, with a total processing capacity of 1.93 million barrels per day. There are only two other competing refineries in Brazil which have an aggregate installed capacity of approximately 0.03 million barrels per day. Our domestic refining capacity constitutes 98.6% of the Brazilian refining capacity. We built nine of our 11 refineries prior to 1972, and we completed the last refinery (Henrique Lage) in 1980. At that time, we were only producing 200 Mbpd of crude oil in Brazil. Our refineries were built to process light imported crude oil. Subsequent to their completion, we discovered larger reserves of heavier crude in Brazil. As a result, we are continually upgrading and improving our refineries to process a heavier crude slate.

We process as much of our domestically produced crude oil as possible through our refineries, and supply the remaining demand within Brazil by importing crude oil and oil products, some of which is also processed in our refineries. As our own domestic production increases and refinery upgrades enable us to process more throughput, we expect to import proportionately less crude oil and oil products. Until January of 2002, we were charged with the responsibility of being the sole supplier of oil products to the Brazilian market. Now that the market is deregulated and we are no longer the sole supplier of oil products to the Brazilian market, we intend to reevaluate our import strategy and may reduce imports to the extent such reductions improve our profitability. We also export, to the extent our production of oil products exceeds Brazilian demand or our refineries are unable to process our growing domestic crude oil production.

We transport oil products and crude oil to domestic wholesale and export markets through a coordinated network of marketing centers, storage facilities, pipelines and shipping vessels. As the monopoly supplier for almost fifty years of a country that ranks as the 11th largest consuming nation in the world, we have developed a large and complex infrastructure. Our refineries are generally located near Brazil's population and industrial centers and near our production areas, which we believe creates logistical efficiencies in our operations.

We recently restructured our fleet of shipping vessels into a more efficient integrated system. In accordance with the requirements of the Oil Law, we have placed our shipping assets into a separate subsidiary, Petrobras Transporte S.A., or Transpetro. This subsidiary leases storage and pipeline facilities and provides open access to these assets to all market participants. Our petrochemicals business is now also included in the refining, transportation and marketing segment.

Our main strategies in refining and transportation are to:

- continue upgrading our refineries to process our heavier domestic crude oil production while better meeting the current demands of the Brazilian market;

- improve quality to meet stricter environmental standards; and

- continue to grow and modernize our transportation infrastructure.

Our refining, transportation and marketing results are reflected in the Supply segment in our audited consolidated financial statements.

Refining

As of December 31, 2002, we had total installed capacity of approximately 2.02 million barrels per day, which makes us the fifth largest refiner of oil products in the world among publicly traded companies. Worldwide, we processed an average of 1.7 million barrels of oil per day in 2002, which represents a utilization rate of 83% for the year, calculated on total capacity. This compares with 84% average utilization rates in 2001 and 82% average utilization rates in 2000.

Our domestic production in 2002 supplied approximately 79% of the crude oil feedstock for our refinery operations in Brazil, as compared to 76% in 2001 and 75% in 2000. We expect an increasing percentage of our crude oil feedstock to be supplied by our relatively lower cost domestic production, as our overall domestic production increases. Because our domestic refining capacity constitutes 98.6% of the Brazilian refining capacity, we supply almost all of the refined product needs of third-party wholesalers, exporters and petrochemical companies, in addition to satisfying our internal consumption requirements with respect to wholesale marketing operations and petrochemical feedstock.

Our refineries are located throughout Brazil, with a heavy concentration in the Southeast region of the country where the demand for domestic products is greatest, due to significant industrial activity and large population centers. Most of our refineries are located near our crude oil pipelines, storage facilities, refined product pipelines and major petrochemical facilities. This configuration facilitates our access to crude oil supply and major end-user markets in Brazil.

Refinery Production and Capacity

For the year ended December 31, 2002, we processed 591 million barrels of crude oil or 1.62 million barrels per day. In November 2002, our catalytic cracking units set a new daily processing record of 526 thousand barrels per day. Our average refining costs (consisting of variable costs and excluding

depreciation and amortization) in Brazil were U.S.\$ 0.91 per barrel in 2002, U.S.\$ 0.95 per barrel in 2001 and U.S.\$1.14 per barrel in 2000. Our exploration and production operations in Brazil supplied approximately 79% of this crude oil, and we purchased the remainder, principally supplies of lighter crude oil used by us to achieve our oil density objectives, from third parties. Due to the heavier crude characteristic of many Brazilian fields, we have invested in equipment and machinery that allows us to convert heavy crude oil to lighter products. The majority of our heavy crude conversion capacity is located in our largest refineries located near our heavy crude oil reserves in the Campos Basin: Landulpho Alves, Duque de Caxias, Paulínia, Presidente Bernardes, Gabriel Passos and Henrique Lage.

The following table describes the installed capacity, refining throughput and utilization of our refineries for each of the three years ended December 31, 2002, 2001 and 2000:

REFINING STATISTICS

Refineries	2002			2001			2000		
	Capacity (Mbpd)	Throughput (Mbpd)	Utilization (%)	Capacity (Mbpd)	Throughput (Mbpd)	Utilization (%)	Capacity (Mbpd)	Throughput (Mbpd)	Utilization (%)
Paulínia	352	329	93	352	325	92	353	330	94%
Landulpho Alves	306	213	70	306	215	70	306	177	58
Duque de Caxias	242	204	84	242	197	81	242	186	77
Henrique Lage	226	198	88	226	222	98	226	223	98
Alberto Pasqualini ⁽¹⁾	189	106	56	189	115	61	189	123	65
Pres. Getúlio Vargas	189	192	101	189	191	101	189	189	100
Pres. Bernardes	170	154	90	170	156	92	170	160	94
Gabriel Passos	151	128	85	151	133	88	151	130	86
Manaus	46	45	98	46	44	96	46	31	67
Capuava	53	44	83	53	46	87	53	41	77
Fortaleza	6	6	106	6	6	100	6	6	100
Total Brazilian	1,930	1,619	84	1,930	1,650	84	1,931	1,596	83
Gualberto Villarroel ⁽²⁾	40	18	42	40	17	42	40	14	35
Ricardo Eliçabe ⁽³⁾	31	29	97	31	0 ⁽⁴⁾	97			
Guilherme Elder Bell ⁽²⁾	20	14	70	20	13	65	20	16	80
Total International	91	62	68	91	30	65	60	30	50
Total	2,021	1,681	83%	2,021	1,680	83%	1,991	1,626	82%

(1) We do not own 100% of this refinery.

(2) Located in Bolivia.

(3) Located in Argentina.

(4) We acquired this refinery through the business combination with Repsol-YPF. As this acquisition occurred in December 2001, we did not consolidate its throughput as part of our 2001 refining statistics.

We operate our refineries, to the extent possible, to satisfy Brazilian demand. Brazil demands a proportionally high amount of diesel, relative to gasoline, both of which together represent more than half of our production. As we operate our refineries to maximize the output of diesel fuel, we produce volumes of gasoline and fuel oil which must be exported.

Brazil's demand for oil products has been relatively constant for the last three years, but we continue to increase our refinery throughput, thereby reducing the amount of products we must import to satisfy demand. We have also increased our exports of refined products. The following table sets forth our domestic production volume for our principal oil products for each of the three years ended December 31, 2002 and 2001 and 2000:

DOMESTIC PRODUCTION VOLUME OF OIL PRODUCTS

	2002	%	2001	%	2000	%
	(Mbpd)		(Mbpd)		(Mbpd)	
Product						
Diesel	596.7	36.4	570.0	34.6	527.4	33.6
Gasoline	311.1	19.0	316.8	19.2	307.3	19.6
Fuel oil	278.3	17.0	293.8	17.9	273.3	17.4
Naphtha and jet fuel	213.3	12.9	241.5	14.7	242.1	15.4
Other	241.4	14.7	224.3	13.6	219.7	14.0
Total	1,640.8	100.0	1,646.4	100.0	1,569.8	100.0

Refinery Investments and Improvements

In recent years, we have made investments in our refinery assets in order to improve our yields of middle and lighter distillates, which typically generate higher margin sales. Our principal strategy with respect to our refinery operations is to maximize throughput of domestic crude oil. Since our heavy domestic crude oil produces a higher proportion of fuel oil for each barrel of crude oil processed, production of fuel oil is expected to remain relatively constant as throughput of additional Brazilian crude oil offsets new investment in conversion capacity.

We plan to invest in refinery projects designed to:

enhance the value of our Brazilian crude oil by upgrading our refineries to increase their capacity to refine greater quantities of heavier crude oil that is produced domestically;

increase production of oil products demanded by the Brazilian market that we currently must import, such as diesel;

improve gasoline and diesel quality, while complying with environmental regulations;

reduce processing costs; and

reduce emissions and pollutant streams.

Major Recent Projects

To pursue our objectives for the refining segment, during the course of the last six years our board of directors has approved the construction of diesel hydro-treatment units for the following refineries:

Duque de Caxias Refinery (REDUC);

Gabriel Passos Refinery (REGAP);

Presidente Getulio Vargas Refinery (REPAR); and

Paulínia Refinery (REPLAN) (two units).

We believe these hydro-treatment units will make it possible to offer diesel fuel containing a maximum sulfur content of 0.05% to metropolitan regions around Brazil, thus meeting stricter environmental standards being implemented under Brazilian law. Capital expenditures for these units are projected to be U.S.\$798 million and completion is expected by the middle of 2004.

Our executive board has also approved within our projected capital expenditures the construction of additional coking units within our existing refineries. These units will allow us to more easily convert our domestically produced heavy fuel oil into middle distillate fuels such as diesel.

Imports

Prior to January 2002, we were effectively responsible under Brazilian Law for ensuring that the supply of crude oil and oil products in Brazil met the country's consumption requirements. To the extent necessary, we were required to import crude oil and oil products to fulfill this responsibility. Although our domestic production is increasing, we continue to import crude oil and refined oil products because our own production is not sufficient to satisfy Brazilian demand. In addition, because the bulk of our domestic reserves consist of heavy crude oil, we need to import lighter crude oils to improve the mix of oils to be refined, and to create certain oil products for which there is demand in the market but that would be too costly for us to produce.

Imported crude oil is transferred into our refineries for storage and processing, with a small percentage being sold to the other two Brazilian refiners. Imported oil products are mainly sold to the retail market in Brazil through BR.

As our domestic crude oil production has increased and our refineries have become capable of processing larger quantities of crude oil, the average daily volume of our imports of crude oil has decreased to 337,000 barrels per day in 2002, as compared to 399,000 barrels per day in 2001 and 394,000 barrels per day in 2000. The following table sets forth the percentage of crude oil that we imported during each of the three years ended December 31, 2002, 2001 and 2000 by region.

IMPORTS OF CRUDE OIL BY REGION

	<u>2002</u>	<u>2001</u>	<u>2000</u>
	Volume (%)		
Region			
Africa	57.3%	43.6%	21.0%
Middle East	29.7	35.8	30.9
Central and South America/Caribbean	10.4	19.5	47.5
Europe	2.6	1.1	0.0
	<u> </u>	<u> </u>	<u> </u>
Total	100.0%	100.0%	100.0%
	<u> </u>	<u> </u>	<u> </u>

In 2002, our total costs of imports of crude oil from all these regions was U.S.\$2,953 million, as compared to U.S.\$3,211 million in 2001 and U.S.\$3,110 million in 2000.

We purchased approximately 33% of our 2002 crude oil imports and 37% of our 2001 crude oil imports pursuant to one-year term contracts, which are considered to be long-term contracts within the industry standard practice. At December 31, 2002, we had two long-term contracts providing for the supply of crude oil to us in Brazil, with suppliers from Saudi Arabia and Argentina. The contract with suppliers from Saudi Arabia was renewed in February 2003 under identical terms, and will now expire in January 2004. Our contracts with suppliers from Argentina expired in February and April 2003 and were not renewed. We are also a significant buyer of crude oil and oil products from suppliers in the international spot market.

The volume of imports of oil products also decreased to 215,121 barrels per day in 2002, as compared to 328,100 barrels per day in 2001 and 383,861 barrels per day in 2000, primarily as a result of the reduction in the import of petrochemical naphtha and diesel, and growing domestic refinery production. The following table sets forth the volume of oil products that we imported during each of the three years ended December 31, 2002, 2001 and 2000:

IMPORTS OF OIL PRODUCTS

	2002	2001	2000
Oil Product	Volume (Mbbbl)		
LPG	20,554.4	25,447.5	32,112.6
Distillates ⁽¹⁾	43,998.8	43,317.0	43,077.4
Naphtha	5,855.9	21,556.9	24,772.2
Others ⁽²⁾	8,110.2	29,436.6	40,147.3
Total	78,519.3	119,758.0	140,109.5

(1) Includes gasoline, diesel fuel and some intermediate fractions.

(2) Includes Algerian NGL, fuel oil, Ethanol, Methanol and others.

In 2002, our total costs of oil product imports, measured on a cost-insurance-and-freight basis, was U.S.\$2,055 million, as compared to U.S.\$3,425 million in 2001 and U.S.\$4,545 million in 2000. For a discussion of import purchase volumes and prices, see Item 5 Operating and Financial Review and Prospects Sales Volumes and Prices Import Purchase Volumes and Prices.

Exports

We also export oil products processed by our refineries, but not required to satisfy Brazilian demand. In addition, we export domestic crude oil that we are unable to process in our refineries because of limited conversion capacity. The following table sets forth the volumes of oil products we exported during each of the three years ended December 31, 2002, 2001 and 2000:

EXPORTS OF OIL AND OIL PRODUCTS⁽¹⁾

	2002	2001	2000
	(Mbbbl)		
Crude oil	92,670.1	53,724	31,571
Fuel oil (including bunker fuel)	58,295.9	51,051	37,863
Gasoline	18,262.6	18,685	12,518
Other	16,326.3	4,369	6,709
Total	188,554.9	127,829	88,661

(1) The figure includes sales made by PIFCo to unaffiliated third parties, including sales of oil and oil products purchased internationally.

The total value of our crude oil and oil products exports, measured on a free-on-board basis, was U.S.\$4,760 million in 2002, U.S.\$2,763 million in 2001 and U.S.\$2,555 million in 2000.

Transportation

The Oil Law requires that a separate company operate and manage the transportation network for crude oil, oil products and natural gas in Brazil. Therefore, in 1998, we created a wholly-owned subsidiary, Transpetro, to build and manage our vessels, pipelines and maritime terminals and handle various other transportation activities. In May 2000, Transpetro also took over the operation of our transportation network and our storage terminals to comply with the requirements of the Oil Law. As of October 1, 2001, with the approval from the ANP, these pipelines and terminals were leased to Transpetro, which started to offer its transportation services to us and third parties. As the owner of the facilities leased to Transpetro, we keep the right of preference for its shipments, based on the historical level of transportation assessed for each pipeline, formally assigned by the ANP. The excess capacity is offered to third parties on a non-discriminatory basis and under equal terms and conditions.

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Prior to the enactment of the Oil Law, we were the only company authorized to ship oil products to and from Brazil and to own and operate Brazilian pipelines. Additionally, only vessels flying the

Brazilian flag were entitled to carry shipments to and from Brazil. Pursuant to the Oil Law, the ANP now has the power to authorize any company or consortium organized under Brazilian law to transport crude oil, oil products and natural gas for use in the Brazilian market or in connection with import or export activities, and to build facilities for use in any of these activities. The Oil Law has also provided the basis for open competition in the construction and operation of pipeline facilities.

Pipelines and Terminals

We own, operate and maintain an extensive network of crude oil and natural gas pipelines connecting our terminals to our refineries and other points of primary distribution throughout Brazil. As of December 31, 2002, our onshore and offshore crude oil and oil products pipelines aggregated 2,826 miles (4,548 kilometers) in length and our natural gas pipelines aggregated approximately 4,819 miles (7,755 kilometers) in length, including the Brazilian side (1,609 miles, or 2,589 kilometers) of the Bolivia-Brazil pipeline. During the second half of 2003, we plan to begin the construction of additional crude oil pipelines totaling approximately 435 miles (700 kilometers) in order to increase throughput capacity and extend our distribution network. Our plans for future crude oil pipeline development are likely to involve joint ventures.

We are currently developing an enhancement of our crude oil transportation system extending from our most productive fields, located in the Campos Basin, to our refineries located in the Southeast region of Brazil. The project, which we refer to as PDET, will involve the construction of an approximately 70 mile (115 kilometers) offshore pipeline and related assets extending from the Campos Basin to Barra do Furado in the state of Rio de Janeiro and an approximately 375 mile (603 kilometers) onshore pipeline and related assets extending from Barra do Furado in the state of Rio de Janeiro to Guararema Terminal in the state of São Paulo. The project will cost approximately U.S.\$1,312 million.

NATURAL GAS PIPELINES

Transpetro also operates 43 storage terminals with aggregate capacity of 63 million barrels of oil equivalent. As of December 31, 2002, tankage capacity at these terminals consisted of 33.5 million barrels for crude oil, 25.4 million barrels for oil products and fuel alcohol and 2.4 million barrels for LPG.

We are currently evaluating alternatives to improve the efficiency of our transportation system, including evaluating improvements to the monitoring and control of our crude oil and natural gas pipeline network through the gradual implementation of a supervisory control and data acquisition system, which, when completed, will monitor the pipelines and storage facilities located throughout the country. We have already implemented the first phase of the project and inaugurated a centralized control and operating center in June 2002, in our headquarters in Rio de Janeiro. Currently, we have a national back-up master station and two regional master stations connected through satellite communication. Tank-farms and pump stations are equipped with mini stations connected to the regional master stations. Our goal is to be able to operate all of our domestic pipelines remotely, initially via the regional stations, and ultimately via the centralized control and operating center located in our headquarters in Rio de Janeiro.

Shipping

As of December 31, 2002, our fleet consisted of the following 59 owned vessels, 55 of which are single hulled and four of which are double hulled, with aggregate deadweight tonnage of 3,050.5 million:

OWNED VESSELS

Type of Vessel	Number	Capacity (deadweight tonnage in thousands)
Tankers	43	2,139.0
Ore/Oil vessels	6	800.3
Liquefied petroleum gas tankers	6	40.2
Ocean tugs	1	
Chemical carriers	3	71.0
Total	59	3,050.5

Fifty-six of these vessels are currently operated by Transpetro and their activities are mainly concentrated in the Brazilian coastline, South America (Venezuela and Argentina), Mediterranean Sea, Caribbean Sea, Gulf of Mexico, West Africa and the Persian Gulf. Our shipping operations support the transportation of crude oil from offshore production systems, our import and export activities and coastal trade.

PRODUCTS AND QUANTITIES TRANSPORTED

Product	2002	2001	2000
	(millions of tons)		
Petroleum	93.2	81.6	69.7
Oil Products	30.1	34.0	31.4
Fuel Alcohol		0.2	0.1
Total	127.3	123.0	107.6
Percentage transported by our own fleet	45.1%	48.3%	51.4%
Coastal transport as a percentage of total tonnage	65.6%	64.9%	67.1%

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In 2002, our shipping activity increased 3.5% compared to 2001, as a result of an increase in offshore domestic oil production, which reflected an increase of 4.6% in coastal trade and of 23.8% in crude oil transportation related to import and exports during the year.

The average monthly-chartered tonnage in 2002 amounted to 3.9 million deadweight tons, as compared to 3.6 million deadweight tons in 2001 and 3.2 million deadweight tons in 2000. The chartered tonnage is continuously adjusted to our needs for overall market supply cost reduction. Our aggregate annual cost for vessel charters was U.S.\$431 million in 2002, U.S.\$707 million in 2001 and U.S.\$471 million in 2000.

Marketing

Our supply segment sells oil products to various wholesale customers and retail distributors in Brazil, including our subsidiary BR and other retailers such as Shell Brasileira de Petróleo S.A., Esso Brasileira de Petróleo S.A., Companhia de Petróleo Ipiranga S.A. and Texaco do Brasil S.A. In the year ended December 31, 2002, we sold 189.6 million barrels of oil products to wholesale customers, with gasoline and diesel fuel representing approximately 82.9% of these sales. Of our total sales in 2002, 158.0 million barrels of oil products were supplied to BR for retail marketing. The following table sets forth our oil product sales to wholesale customers and retail distributors for each of the three years ended December 31, 2002, 2001 and 2000:

OIL PRODUCT SALES

	2002	2001	2000
	_____	_____	_____
	(MMbbl)		
Product			
Diesel	218.0	214.3	221.5
Gasoline	110.2	93.6	106.5
Fuel oil	77.5	105.5	101.5
Naphtha and jet fuel	80.9	101.6	117.3
Other	311.6	246.4	206.6
	_____	_____	_____
Total	798.2	761.4	753.4
	_____	_____	_____
Customer			
Wholesalers			
Diesel	110.6	111.6	165.5
Gasoline	46.6	46.7	85.9
Other	32.4	34.7	132.3
	_____	_____	_____
Total wholesalers	189.6	193.0	383.7
	_____	_____	_____
Retail distributors			
BR	158.0	146.0	139.5
Third parties	450.6	422.4	230.2
Total retail distributors	608.6	568.4	369.7
	_____	_____	_____
Total customers	798.2	761.4	753.4
	_____	_____	_____

Prior to the implementation of the Oil Law, we were required to be Brazil's principal wholesale supplier of oil products and it was therefore necessary to establish significant marketing operations and infrastructure in numerous geographic areas to ensure supply throughout the country. As a result of this system, we often had to establish and maintain distribution outlets in geographic areas that were not economically viable.

Petrochemicals

We conduct our petrochemical activities through our subsidiary, Petrobras Química S.A., or Petroquisa. Petroquisa is a holding company which holds minority voting interests in nine operational petrochemical affiliated companies involved in the production and sale of basic petrochemical products, derivative petrochemical products and fertilizers. As of December 31, 2002, our ownership percentage of the total capital of these affiliates ranged from 13.5% to 62.4% and our ownership percentage of the voting capital of these affiliates ranged from 8.1% to 50.0%. The total book value of these investments is U.S.\$167.5 million.

The basic supply feedstock used in Brazil's petrochemical industry is naphtha, an oil product. Until 2001, we were the sole supplier of naphtha to Brazil's petrochemical industry. In 2002, the petrochemical industry imported approximately 28% of its naphtha needs, and we supply the remainder from our refining operations.

Our petrochemicals business, based on the equity in results of non-consolidated companies, accounted for U.S.\$10.8 million in 2002. We currently expect to maintain a presence in the petrochemicals industry principally by participating in projects located adjacent to our refineries. We expect that our selective investment in petrochemicals will solidify our involvement in the entire energy value chain, integrating refining and primary and secondary products. Although we have divested of certain interests in the petrochemical segment in the past, we plan on increasing the current level of our investments, unless such investments cease to be profitable.

In line with our strategy of stimulating demand for natural gas products, we also continue to invest in Rio Polímeros S.A., which is located next to our Duque de Caxias refinery (REDUC). Other investors include BNDES and two leading private Brazilian petrochemical companies, Suzano and Unipar. Petroquisa holds a 16.7% interest of the voting and preferred capital in Rio Polímeros. Of the approximately U.S.\$1.0 billion budgeted construction cost over the next three years, 60% is being provided by long-term loans from or guaranteed by U.S. Ex-Im Bank, BNDES and SACE (the Italian Export Credit Agency), and 40% is expected to be funded by equity investments, of which our portion is approximately U.S.\$67 million. As of December 31, 2002, we had spent approximately U.S.\$28 million of this total. We expect Rio Polímeros to be operational by mid-2005 and to produce 515,000 tons per year of polyethylene and 60,000 tons per year of propylene, from ethane and propane extracted from natural gas originated in the Campos Basin.

We also intend to market products derived from our refining processes. We are currently negotiating with BASF, the German chemicals company, to create a joint venture in order to produce 90,000 tons per year of Acrylic Acid and 60,000 tons per year of Super Absorbent Polymer -SAP. As raw materials for production, we will use the propylene derived from LPG refined at our Henrique Lage refinery (REVAP). The estimated total investment is US\$148 million, and it is expected that the return on investment will be consistent with our Strategic Plan for the Petrochemical area (minimum of 15% per year). We expect start-up of operations in 2007.

Distribution

Summary and Strategy

Through BR, we distribute oil products, fuel alcohol and natural gas to retail, commercial and industrial customers throughout Brazil. Our oil products, fuel alcohol and vehicular natural gas are sold to service stations under exclusive supply agreements. Besides providing the products, we also provide to those service stations, identified with our trademark BR, managerial and technical support to ensure quality and consistency in our operations and establish control procedures. We own only 602 of the 7,119 service stations that sell our products, but all of them are required to be identified by our BR trademark. We also sell non-fuel products through oil lubrication centers.

Our main strategies in distribution and marketing are to:

achieve a leadership position in all market segments where BR operates, focusing on innovation, integration of our profitable service stations network, and providing effective energy solutions for BR's customers;

establish BR as the model of logistical and operational efficiency within the fuel distribution segment, while abiding by international health, safety and environmental guidelines; and

position BR as the top brand in the eyes of customers by providing a recognizable national network of quality service providers. Our distribution results are reflected in the Distribution segment in our audited consolidated financial statements.

General

We distribute oil products, fuel alcohol and natural gas to retail, commercial and industrial customers throughout Brazil. Our operations are supported by tankage capacity of approximately 9,465 barrels of oil equivalent, at 78 storage facilities and 99 aviation product depots at airports throughout Brazil.

Retail

As of December 31, 2002, our sales network in Brazil included 7,119 retail service stations compared to 7,031 as of December 31, 2001, and comprised approximately 25% of the total number of service stations in Brazil, all under the brand name BR. Over 65% of these BR stations are located in the South and Southeast regions of Brazil, where over 59% of Brazil's total population of 165 million reside. Of these 7,119 service stations, BR owned 602. As required under Brazilian law, BR subcontracts the operation of all its service stations to third parties. The other 6,517 service stations were owned and operated by dealers, who use the BR brand name under license with BR facilities as their exclusive suppliers. BR provides technical support, training and advertising for its network of service stations.

We sell oil products to service stations under exclusive supply agreements which are typically for a term of seven years. Under these agreements, we also provide managerial and technical support to ensure quality and consistency in our operations and establish control procedures.

In 2002, 170 of our service stations also sold vehicular natural gas, compared to 119 in 2001 and 58 in 2000. The sales from these stations consisted of 13,245 million cubic feet (375 million cubic meters) in 2002, representing 60.6% of Brazilian market share, 9,893 million cubic feet (280 million cubic meters) in 2001, representing 61.4 % of Brazilian market share and 5,090 million cubic feet (144 million cubic meters) in 2000, representing 57.3% of the Brazilian market share in that year.

The table below sets forth market share (based on volume) for retail sales of different products in Brazil for each of the years ended December 31, 2002, 2001 and 2000:

DISTRIBUTION MARKET SHARE

	2002	2001	2000
Fuel oil	67.4%	66.5%	65.8%
Diesel	27.1%	26.6	26.6
Gasoline	23.8%	21.8	20.0
Fuel alcohol	30.5%	26.6	25.0
Total	32.9%	32.8%	32.0%

Source: Petrobras based on figures provided by *Sindicato dos Distribuidores de Combustíveis-Sindicom*

Prices to retailers have generally tended to remain consistent between competing distributors, particularly due to the low margin usually provided. Therefore, competition among distributors continues to be primarily based on product quality, service and image.

BR provides financing to certain of its service station operators to improve their competitiveness, the terms of which may vary in accordance with the provisions of each financing agreement. These agreements are of two types: unconditional and conditional. The unconditional agreements must be paid in full and bear interest at market rates. The conditional agreements are contingent upon the service station operators purchases of minimum volumes of oil products as set forth in each financing agreement, in which case the total amount of the conditional agreement is forgiven by BR. These costs amounted to approximately U.S.\$43.6 million during 2002, compared to U.S.\$24.5 million during 2001 and U.S.\$29.5 million during 2000.

During 2002, approximately 25% of the retail sales at service stations in Brazil were through BR-owned or franchised entities. We believe that our market share position has remained strong over the past several years due to the strong brand name recognition of BR, the remodeling of our service stations and the addition of lubrication centers and convenience stores.

In 1996, BR created the *De olho no Combustível* program (the Eye on the Fuel program), which is designed to ensure that the fuels sold to end consumers at our service station networks are identical in content to the fuels originating from our refineries. We have already certified 3,797 service stations under this program.

The market for gasoline and diesel fuel in Brazil is highly competitive and we expect that prices will be subject to continuing pressure. Accordingly, we intend to build upon the strong brand image that we have established in Brazil to enhance profitability and customer loyalty. Currently, we plan to take the following actions through 2005:

- increase non-fuel product sales through oil lubrication centers, supplied by our lubricants plant in the State of Rio de Janeiro, which is one of the most advanced industrial plants for lubricants in South America;

- increase the number of franchise convenience stores under the BR Mania name;

- increase the use of client loyalty programs and new technologies; and

- reduce operating and administrative costs and provide services, such as financial services and controls, through investments in advanced telecommunications and data processing technology.

The transfers of the rights to supply products to gas stations to Repsol-YPF under the swap transaction with that company represented less than 1.2% of BR's market share by volume. Through this swap transaction, we acquired a refinery with a production capacity of 30,500 barrels per day and 735 service stations in Argentina, which represented approximately 12% of the Argentine retail fuel market. See

International Argentine Activities Repsol Asset Swap.

Commercial and Industrial

We distribute oil products to commercial and industrial customers through BR. Our major customers are aviation, transportation and utility companies and government entities, all of which generate relatively stable demand. We have a market share in the commercial and industrial distribution segment in excess of 45%, which has remained relatively constant over the past several years.

Set forth below are commercial and industrial sales statistics for each of the three years ended December 31, 2002, 2001 and 2000:

COMMERCIAL AND INDUSTRIAL SALES BY PRODUCT

	For the Year Ended December 31,		
	2002	2001	2000
	(Mboe)		
Fuel oil	32,642	40,062	42,119
Diesel	67,374	63,694	58,239
Gasoline	30,688	27,651	26,505
Jet fuels	14,397	15,460	15,492
Fuel alcohol	3,522	2,960	4,027
Lubricants	1,397	1,293	1,249
Others	20,586	18,818	16,659
Total	170,606	169,938	164,290

Delisting of BR

On November 7, 2002, our board of directors approved a public tender offer for all the outstanding shares of BR through a swap of BR shares for preferred shares to be issued by us. We conducted the share swap to acquire the 99.2% of BR shares we did not own in order to incorporate BR as a wholly-owned subsidiary and effect the delisting of BR's public shares, which were publicly traded in Brazil. The public tender offer will allow us to advance the interests of our shareholders by:

aligning the strategic interests of the two companies, thereby avoiding any potential conflicts;

focusing the attention of investors on our shares, which could lead to an increase in the liquidity of such shares;

capitalizing on the synergies that would result from the absorption of BR as a wholly-owned subsidiary; and

adhering to the corporate and operational model adopted by our principal international competitors.

An independent appraisal determined the fair value of BR stock to be R\$45.40 (U.S.\$11.66) for each 1,000-share lot of BR stock. A similar independent appraisal established the fair value of our preferred shares to be issued at R\$64.90 (U.S.\$16.68) per share. The exchange ratio was initially set at 0.7 shares of our preferred stock for every thousand-share block of BR stock, augmented by an additional U.S.\$0.9427 per share paid to BR shareholders as an incentive for them to accept the public offer. In order to account for dividends paid to our and BR's shareholders three months after the date of the public auction for BR shares, this exchange ratio was subsequently adjusted to 0.9626 shares of our preferred stock for every thousand-share block of BR stock.

A public tender auction was held on January 29, 2003 and our board of directors approved the issue of 9,866,828 preferred shares at an issue price of US\$12.76 per share, under the terms of the capital increase approved during the meeting of our board of directors held on November 7, 2002. As a result, our capital increased by US\$122 million. After verifying that all of the conditions for delisting BR's shares were met, on February 5, 2003, the CVM effected the delisting of BR shares.

Natural Gas and Power

Summary and Strategy

The natural gas market in Brazil has been rapidly growing. In 2002, we estimate that natural gas consumption represented approximately 5.5-6.0% of Brazil's primary energy consumption, as compared to 4.7% in 2001 and 3.8% in 2000. The Brazilian government has estimated that natural gas will represent 10% of primary energy consumption by 2005 and 12% by 2010. We expect that a large portion of this growth will come from the development of natural gas-fired thermoelectric plants in Brazil, increased industrial demand, as well as from the Brazilian government's environmental policies encouraging the replacement of traditional industrial fuels with cleaner energy sources. During the last three years, we estimate that industrial consumption of natural gas has grown by 17% while vehicular consumption has grown by approximately 67%.

To capitalize on these growth opportunities, we have adopted a vertically integrated strategy. As a result of our petroleum exploration and production activities in Brazil, we produce significant amounts of associated natural gas as a by-product. We have also invested heavily in production facilities and pipeline capacity to import natural gas from Bolivia, where we, and other oil companies, have discovered substantial non-associated reserves. To secure a market for our natural gas, we have been investing in domestic gas distribution companies, as well as in thermoelectric plants, with the intention to further develop the market for our natural gas.

Our main strategies in the natural gas and power segment are to:

expand the natural gas market in Brazil to ensure a market for the natural gas that we produce, or acquire through off-take obligations;

become an important participant in the South American gas and power markets, while effectively integrating these business segments with our other business segments; and

participate in the Brazilian power market in order to ensure a market for our natural gas and oil products.

Our natural gas and power results are reflected in the "Gas and Energy" segment in our audited consolidated financial statements.

Natural Gas

In the course of developing and producing crude oil, we produce significant volumes of associated natural gas. In addition, we have also made significant investments to facilitate the importation of natural gas from Bolivia.

Pipelines

Our main pipeline investment was the development and construction of the Bolivia-Brazil natural gas pipeline, which has a total capacity of 1,060 MMscfd (30 MMcmd). The pipeline is 1,969 miles (3,150 kilometers) in length, representing 40% of the existing Brazilian onshore gas pipelines, and running from Rio Grande in Bolivia to Porto Alegre in Southern Brazil. The Bolivia-Brazil pipeline connects to our domestic pipeline system that transports natural gas from the Campos and Santos Basins. The construction of the pipeline was divided into two phases. We completed the first phase, linking Bolivia to São Paulo, in February 1999 and commenced operations in July 1999. We completed the second phase, linking São Paulo to Porto Alegre, in March 2000 and commenced operations in April

2000. We are a significant investor in the Bolivia-Brazil natural gas pipeline, holding an 11% interest in GTB - Gas TransBoliviano S.A., or GTB, the corporate entity owning the Bolivian portion of the pipeline, and a 51% interest in TBG - Transportadora Brasileira do Gasoduto Bolívia-Brasil S.A., or TBG, the corporate entity owning the Brazilian portion of the pipeline.

Our investment in the Bolivia-Brazil gas pipeline was the result of a 1996 commercial agreement for the purchase of natural gas between the Bolivian state oil company, Yacimientos Petrolíferos Fiscales Bolivianos - YPFB, and us. The gas purchase contract signed by us requires us to purchase from YPFB on a take-or-pay basis specified quantities of natural gas transported through the pipeline over a 20-year term.

We are also investing in two major domestic natural gas projects: Cabiúnas and Southeast-Northeast Gas Pipeline Network.

The Cabiúnas project comprises transportation and processing facilities of associated natural gas from the offshore oil fields in the Campos Basin to the State of Rio de Janeiro, and includes the construction of an undersea facility for storage of natural gas during declines in consumption. We expect this project to be fully operational by mid-2004 and to increase transportation capacity from the current 290 million cubic feet (8.2 million cubic meters) per day to a total of 494 million cubic feet (14 million cubic meters) per day of associated gas while reducing the volumes of natural gas currently flared on offshore platforms and alleviating existing constraints on oil production from these platforms. In 2002, the average daily volume of natural gas flared on the offshore platforms of the Campos Basin was 185 million cubic feet (5.2 million cubic meters).

We are currently developing the Southeast-Northeast Gas Pipeline Network (*Malha Sudeste-Nordeste*) jointly with private capital investors (the Malha project). This project will create additional transportation capacity by integrating new natural gas markets in the Northeast and Southeast regions of Brazil. It involves the construction of an approximately 700 mile (1,120 kilometers) pipeline, which is expected to start operations in 2005, at a total cost approximately U.S.\$750 million.

Local Distribution Companies

We sell natural gas in Brazil to local gas distribution companies, as under Brazilian law, each state has the monopoly right to distribute gas within a certain region. Most states established companies to act as local gas distributors and sold minority interests in them. We have invested actively in local gas distribution companies, and we currently have minority interests in 17 of these natural gas distribution companies, 12 of which are in operation. We invested in gas distribution companies through BR until March 2002, and subsequently sold these investments to our subsidiary, Petrobras Gás S.A. - Gaspetro. In Espírito Santo State, we have the exclusive rights to distribute natural gas through BR.

Our capital expenditures in these natural gas distribution companies as of December 31, 2002 totaled U.S.\$35 million, as compared to U.S.\$32 million as of December 31, 2001 and U.S.\$31 million as of December 31, 2000. Our business plan includes total budgeted capital expenditures in the gas distribution business of approximately US\$10.2 million from 2003 through 2007. We serve as the technical and commercial operator in all of the distribution companies in which we have a minority shareholding stake.

Each of the distribution companies in operation in which we have an interest has entered into long term gas supply contracts with us under which such companies have take-or-pay obligations (in the case of contracts relating to Brazilian gas), and ship-or-pay and take-or-pay obligations (in the case of contracts relating to Bolivian gas or with thermoelectric power producers).

The following table sets forth our domestic sales of natural gas to affiliated and non-affiliated local distribution companies for each of the three years ended December 31, 2002, 2001 and 2000:

DOMESTIC SALES OF NATURAL GAS TO LOCAL DISTRIBUTION COMPANIES

	Year Ended December 31,		
	2002	2001	2000
	(in MMscfd)		
Total sales annual average	862	717	555
Annual sales growth	20.3%	29.2%	28.0%

Commitments and Sales Contracts

Take-or-pay commitments. Under our contracts with YPFB for the purchase of natural gas, we have agreed to purchase minimum volumes of natural gas from Bolivia at a formula price which varies with the price of fuel oil. Set forth below are actual amounts we purchased and paid in 2000, 2001 and 2002, and the minimum volumes we have agreed to thereafter, together with an estimate (assuming a Brent crude oil price of U.S.\$15.00 per barrel) of the amounts we are obligated to pay for such minimum volumes:

NATURAL GAS TAKE-OR-PAY COMMITMENTS

	2000	2001	2002	2003	2004	2005	Yearly Average after 2005 ⁽¹⁾
Volume Obligation (Mmcmd)	5	9	14	18	24	24	24
Volume Obligation (Mmcf)	193	305	504	652	850	850	850
Estimated Payments (U.S.\$ million) ⁽²⁾	112	194	279	305	330	323	321

(1) Commitments are pursuant to a 20-year term contract set to expire in 2019.

(2) Price based on a formula which varies with the price of fuel oil. Amounts have been calculated based on actual fuel oil prices for 2000, 2001 and 2002, and a fuel price based on an assumed Brent crude price of U.S.\$27.54/bbl in 2003, U.S.\$18.00/bbl in 2004 and U.S.\$15.00/bbl from 2005 forward. Actual amounts may vary.

Ship-or-pay commitments. In order to support the financing for the Bolivia-Brazil pipeline, TBG's portion of which is consolidated in our balance sheet, we also have entered into unconditional ship-or-pay purchase obligations for the transportation of natural gas with GTB and TBG, the companies which own and operate the Bolivian and Brazilian portions of the pipeline. Our volume obligations under the ship-or-pay arrangements are generally designed to meet the take-or-pay obligations with respect to our gas purchase contracts with YPFB. The total capacity of 1,060 MMscfd (30 Mmcmd) also includes a transportation capacity option (TCO) of 212 MMscfd (6 Mmcmd), valid for a 40-year term. This transportation capacity option was granted to us in consideration for our agreed investment of approximately U.S.\$379 million in the Boliva-Brazil gas pipeline. The total estimated project cost was U.S.\$1.9 billion, which has already been invested as of December 31, 2002. Set forth below are the actual amounts we purchased and paid in 2000, 2001 and 2002, and the minimum volumes we have agreed to thereafter, together with an estimate (assuming certain changes in the U.S. Consumer Price Index (CPI)) of the amounts we are obligated to pay for such minimum volumes:

NATURAL GAS SHIP-OR-PAY COMMITMENTS

	2000	2001	2002	2003	2004	2005	Yearly Average after 2005 ⁽¹⁾
Volume Commitment (Mmcmpd)	9	10	12	23	24	24	24
Volume Commitment (Mmcfpd)	321	364	438	818	850	850	850
Estimated Payments (U.S.\$ million) ⁽¹⁾	163	189	232	433	475	481	479

(1) Commitments are pursuant to approximately 20-year term contracts set to expire in 2019.

(2) Based on a fixed tariff, escalated based on assumed changes in the U.S. CPI. Actual amounts may vary.

Natural gas sales contracts. In light of these take-or-pay and ship-or-pay obligations, we have entered into or negotiated firm take-or-pay and ship-or-pay sale arrangements to sell our domestic and international natural gas to local gas distribution companies and thermoelectric plants, most of which we operate and in which we own a minority interest.

The arrangements with the thermoelectric plants are made through contracts with the local distribution companies, which in turn enter into back-to-back arrangements with the thermoelectric plants, and a portion of the gas buyer's payments is usually guaranteed to us by the parent companies of the thermoelectric companies or through financial guarantees. The table below sets forth our actual sales for 2000, 2001 and 2002, and commitments by local gas distribution companies and by thermal power plants to us for the firm purchase of volumes of natural gas thereafter, together with an estimate (assuming a Brent crude oil price of U.S.\$15.00 per barrel) of the amounts obligated to be paid for such volumes:

NATURAL GAS SALES CONTRACTS⁽¹⁾

	2000	2001	2002	2003	2004	2005	Yearly Average after 2005 ⁽²⁾
(in MMscfd)							
To Local Gas Distribution Companies							
Affiliated	225	317	398	426	473	541	572
Unaffiliated	169	246	304	500	557	604	713
To Power Generation Plants							
Affiliated	0	0	139	299	334	334	309
Unaffiliated ⁽³⁾	0	0	25	217	343	343	343
Total	394	563	866	1,443	1,707	1,822	1,936
Estimated Contract Payments (U.S.\$ Million) ⁽⁴⁾	\$423	\$574	\$897	\$1,437	\$1,418	\$1,406	\$1,535

(1) Includes both domestic and international natural gas. Sets forth take-or-pay and ship-or-pay obligations, not maximum sales.

(2) Commitments are pursuant to contracts of various terms, expiring at intervals between 2006 through 2019.

(3) Certain commitments are subject to the satisfaction of customary conditions precedent, which we expect to be fulfilled in the near term.

(4) Price based on a formula which varies with the price of fuel oil. Amounts have been calculated based on actual fuel oil prices for 2000, 2001 and 2002, and a fuel price based on an assumed Brent crude price of U.S.\$27.54/bbl in 2003 U.S.\$18.00/bbl in 2004 and U.S.\$15.00/bbl from 2005 forward. Actual amounts may vary.

Pricing. On June 1, 2001, the Brazilian government instituted a new mechanism which allows a U.S. dollar indexed component of the natural gas pricing mechanism to be passed through to the thermoelectric plants for a period of 12 years, pursuant to *Portaria* No. 176 (a joint regulatory act issued

by the Ministry of Mines and Energy and the Ministry of Finance), which was updated by *Portaria* No. 234 issued on July 22, 2002. See Regulations of the Oil and Gas Industry in Brazil Price Regulation Natural Gas . We expect that this mechanism will enable us to sell natural gas to a number of thermoelectric plants that were unwilling to purchase natural gas under the prior gas price regulation because it requires the buyer to take the intra-annum exchange rate risk. Under the new formula, exchange rate variations are reflected in gas prices annually, while we will be remunerated at market based interest rates for any resulting delay in gas price adjustments.

Power

Brazil currently has an installed electricity generation capacity of approximately 80,000 MW. More than 97% of this capacity is interconnected to form one single integrated system, with approximately 88% of the electricity supplied to that system coming from hydroelectric sources. Annual consumption of electricity grew annually at a rate of 4.5% during the 1990s. As a result of the rapid growth in electricity demand, combined with the limited investment in the sector during the last two decades and a high dependency on hydroelectric power (and consequently susceptibility to a prolonged drought), we believe substantial additional generation capacity needs to be developed in Brazil. In recognition of the need for such capacity and in order to promote the development of thermoelectric plants, the Brazilian government established the PPT.

History of the PPT

The PPT, as originally envisioned in February 2000, prioritized the development of 49 new thermoelectric plants to meet Brazil's growing electricity demand requirements. These PPT thermoelectric plants were to have increased Brazil's generation capacity by approximately 17,000 MW by 2003. Despite a number of incentives introduced by the Brazilian government to promote the PPT, those thermoelectric power plants under development have been slow to progress. Developers have faced numerous difficulties, including inability to pass on financial and operating costs in U.S. dollars following a devaluation, and the reluctance of many distribution companies to sign power purchase agreements because of existing supply contracts and lower consumer demand for thermoelectric power as a result of excess supply of hydroelectric power. In light of these difficulties, the Brazilian government reviewed the PPT, and reduced the program to 39 projects, representing a planned 13,500 MW of additional capacity by 2004.

In line with our strategies in this segment, we decided to participate in the PPT either as a minority shareholder, offtaker or both, in a number of strategically important thermoelectric plants. Initially, we were planning to participate in 26 of the PPT projects, with total capacity of approximately 10,500 MW, of which 4,500 MW corresponds to our purchase commitments at that time.

Current Status of PPT

The rationing program instituted by the Brazilian government from the beginning of June of 2001 until the end of February 2002, created a permanent reduction in demand of approximately 7%, according to recent Brazilian government estimates, resulting from the more rational use of electricity achieved during this period. Additionally, heavy rains have filled the reservoirs to approximately 70% of their maximum capacity. As a result, in the short term, existing hydroelectric capacity is sufficient to meet the energy needs of the country. The combination of exceptional hydrological conditions and demand reduction has limited, in the short-term, the price and volume at which we can sell electricity from thermoelectric plants. However, in the medium term, we believe that expected growth in electricity demand combined with limited spare hydroelectric capacity available will create the need for some thermoelectric capacity in Brazil. In addition, electricity costs of thermoelectric plants are expected to be relatively competitive with projected incremental hydroelectric capacity.

Currently, the new administration of the Brazilian government is reviewing the power sector and developing a comprehensive set of new regulations to govern the entire power sector in the future.

Status of our Investments

We believe our participation in the construction and development of thermoelectric plants has strategic benefits for our business for several reasons:

our participation in the power sector helps create a market for natural gas made available through our investments in the natural gas business, such as the construction of the Bolivia-Brazil pipeline and the development of reserves in Bolivia;

we are able to build inside the fence co-generation plants within our refineries and other facilities, which provide us with a reliable and inexpensive source of electricity for use in our own refineries; and

these co-generation plants also produce steam for use by our refineries and in onshore crude oil recovery enhancement projects. The production and consumption of steam reduces the overall costs of generating electricity, making such electricity cost competitive relative to other thermoelectric generation, including new hydroelectric developments.

In light of the uncertainties surrounding thermoelectric power, we are limiting our investments in the power sector. With an aim to reducing our exposure, we now plan to invest in 16 thermoelectric plants, with total capacity of approximately 6,700 MW, including six co-generation plants. Of these 16 thermoelectric plants, ten are already under construction or operation. With the exception of four plants in which we have a majority stake, we anticipate that our investments in the thermoelectric plants will be as a minority shareholder. These thermoelectric plants are located primarily in the Southeast and Northeast regions of Brazil. Some of them also have connections with other natural gas projects involving the construction of pipelines, which facilitates our distribution activities.

We currently have halted all investment in thermoelectric power, except for the ten plants under construction or operation. We have acquired turbines for future projects that have been delayed, although we have negotiated postponements in the delivery of such turbines as well as the related payments. We do not intend to continue developing the thermoelectric plants still in the planning stage, or expand existing thermoelectric plants until we are satisfied with new government regulations being formulated to govern thermoelectric power. Our plans will also depend upon the level of demand for electricity in general and the success of our electricity marketing efforts.

Financial Exposure

To encourage the development of some of the thermoelectric power plants in which we participate with an equity interest, or to which we sell our natural gas, we have entered into agreements to provide economic support. Our obligations under these agreements are either structured as:

contingent capacity payments, in the case of the merchant thermal power plants, in which we agree to cover any shortfalls if the plant is unable to satisfy certain revenue targets and to service capital and cover operating costs and taxes; or

tolling arrangements whereby we agree to provide each of the inputs to produce electricity and operate the plant, as well as off-take the electricity, remunerating the thermoelectric plant at a price that will service capital (equity and debt).

We have only entered into tolling arrangements with thermoelectric plants in which we have an equity interest. Our power commitments under merchant and tolling agreements are as follows:

POWER OFFTAKE PROJECTED COMMITMENTS⁽¹⁾

	2002	2003	2004	2005	2006	2007	Yearly Average after 2007
	(Average MW)						
NE Contingent Capacity Payments	90	240	240	240	240	240	
NE Tolling Arrangements	95	255	255	255	255	255	255
Total Northeast Region	185	495	495	495	495	495	255
S/SE Contingent Capacity Payments	1055	1190	1190	1190	893		
S/SE Tolling Arrangements	310	1440	2000	2000	2000	2000	2000
Total South and Southeast Region	1365	2630	3190	3190	2893	2000	2000
Total Commitments	1550	3125	3685	3685	3388	2495	2255

(1) Under these contracts, in the event the thermoelectric plant has a revenue shortfall, we are required to make capacity payments in respect of the MW quantities set forth above. The amounts of the payments may vary based on a number of factors.

The total amount of electricity in respect of which we have tolling or capacity commitments, based upon commitments of projects under construction or in operation, is 3,685 MW as of the end of 2005, of which 2,255 MW come from firm tolling agreements and 1,430 MW from contingent capacity payments.

We expect that the electricity we purchase under tolling agreements will be partly used for the consumption in our facilities, estimated to be approximately 300 MW per year, equally allocated between the Northeast and South/Southeast regions of Brazil, firm power sales contracts to third party distributors and industrial consumers. Currently, we do not expect to enter into tolling or capacity arrangements with respect to future thermoelectric plants. Our strategy is to sell all of the other energy in respect of which we have purchase commitments through medium and long-term Power Purchase Agreements, or PPAs. However, as a result of current price levels, we have also negotiated certain shorter-term contracts. As of May 2003, PPAs included offtake commitments totaling 1,530 average MW for 2004, 1,700 average MW for 2005 and 1,400 average MW for 2006, including PPAs executed by merchant power plants. In order to further manage our power purchase commitments, we are continuing to implement an aggressive plan to negotiate medium and long-term PPAs with distributors, industrial consumers and trading companies.

On April 16, 2002, the Brazilian Congress approved Provisional Measure 14, which permits us to include in our corporate purpose activities related to energy. This regulation was signed into Law 10,438, on April 26 2002, and we amended our bylaws, in June 2002, to incorporate energy as part of our corporate purpose. In addition, we have established a new subsidiary, Petrobras Energia Ltda., to negotiate sales and purchases of electricity.

In 2002, we created a U.S.\$205 million provision for reasonably probable losses from our investments in thermoelectric power plants. On May 7, 2003, our executive board authorized an increase in this accounting provision in the first quarter of 2003 by a further US\$205 million, equivalent to 94% of the maximum expected loss for 2003, in consideration of the fact that the expected sales of energy available through our PPAs in 2003 and the level of dispatch from the thermoelectric power plants initially anticipated were not realized. After deducting the losses incurred in the first quarter of 2003, which amounted to US\$111 million, the balance of the provision totaled US\$316 as of March 31, 2003, to

cover probable reasonably probable losses related to our investments in the energy sector in the 2003 fiscal year.

The provisions are related to:

our commitment to make contingency capacity payments to the Macaé, Merchant, Eletrobolt and Termoeceará thermoelectric power plants, for the purpose of reimbursing operating expenses, taxes and the opportunity cost on capital invested if the revenues earned on the sales of energy from these plants are insufficient to cover the costs and expenses incurred, which as of March 31, 2003, totaled approximately US\$1,461 million for the period from 2003 to 2008; and

our commitment to supply natural gas for the production of energy to the Termorio, Termobahia, UEG Araucária, FAFEN Energia, Ibitermo, Três Lagoas, UTE Canoas and Nova Piratininga thermoelectric power plants and to purchase part or all of the energy generated by these plants at a price that remunerates invested capital, which, as of March 31, 2003, totaled approximately US\$6,889 million for the period from 2003 to 2025.

Assuming a discount rate of 12% per year, we estimate that the net present value of our maximum financial exposure from our investments in the energy sector as of March 31, 2003, is approximately U.S.\$1,700 million.

In January 2003, Companhia Paranaense de Energia COPEL ceased making its monthly capacity payments to UEG Araucária Ltda. UEGA (an independent power producer that initiated operations in September 2002 and which is 60% owned by El Paso, 20% by Copel and 20% by us). As of June 2003, such unpaid capacity payments totaled approximately U.S.\$23 million. In April 2003, UEGA initiated arbitration proceedings before the ICC International Court of Arbitration to recover damages from COPEL's default under the PPA entered into between the two parties.

International

Summary and Strategy

In 2002, approximately 2.68% of our net revenues were generated outside Brazil. We seek to evolve from a dominant integrated oil and gas company in Brazil into an energy industry leader in Latin America and a significant international oil and gas company. Currently, we plan to focus our non-Brazilian exploration, development and production activities regionally, in areas where we can successfully exploit our competitive advantages, such as deepwater drilling. We particularly intend to drill off the west coast of Africa and the Gulf of Mexico and onshore in South America. Additionally, we are integrating our natural gas activities in Brazil with natural gas production in Bolivia and Argentina. We are also increasing our downstream operations in South America and have acquired refineries and service stations in Argentina and Bolivia.

We have budgeted U.S.\$5.1 billion in capital expenditures for the period 2003-2007 for all of our international investments. These budgeted capital expenditures are subject to government approval.

Our main strategies in the international segment are to:

expand exploration and production abroad to meet our production targets, focusing on areas where our deepwater exploration skills may give us a competitive advantage, such as West Africa and the Gulf of Mexico;

increase our operations and our upstream and downstream integration in South America;

continue to build our natural gas business in the Southern Cone; and

access refinery capacity abroad capable of processing our exports of heavy crude oil.

Our international results are reflected in the International segment in our audited consolidated financial statements.

Exploration and Production

We began our international exploration and production activities in 1972, and made our earliest discoveries onshore in Colombia in that year. We currently conduct significant international exploration activities in Angola, Argentina, Bolivia, Colombia, Nigeria, the United States and Trinidad & Tobago. In addition, we are currently performing studies to evaluate blocks where we hold interests in Angola, Argentina, Colombia, Nigeria and the United States. As of December 31, 2002, we participated in crude oil and natural gas exploration activities in eight other countries and production activities in five countries, which collectively represented approximately 4.6% of our total capital expenditures for crude oil and natural gas exploration and production activities. Our capital expenditures for international exploration and development were U.S.\$224 million for the year ended December 31, 2002, U.S.\$318 million for the year ended December 31, 2001 and U.S.\$236 million for the year ended December 31, 2000. The following table provides information about the allocation of such expenditures for each of the three years ended December 31, 2002, 2001 and 2000:

DISTRIBUTION OF INTERNATIONAL EXPLORATION ACTIVITIES

	<u>2002</u>	<u>2001</u>	<u>2000</u>
South America ⁽¹⁾	34.0%	27.8%	41.2%
West Coast of Africa	41.6%	45.8	49.1
Gulf of Mexico	24.4%	24.7	6.2
North Sea ⁽²⁾	0.0	1.7	3.5
Total	100.0%	100.0%	100.0%

(1) Includes Argentina, Bolivia and Colombia.

(2) We sold our interests in the North Sea in 2001.

Development

Over the past three years, we have participated in the development of a number of fields internationally, including three in Argentina, two in Bolivia, ten in Colombia, and three in the United States.

In 2002, our net production outside of Brazil averaged 35,224 barrels per day of crude oil and NGLs and 22,947 barrels of oil equivalent of natural gas per day at an average lifting cost of U.S.\$2.08 per barrel. In comparison with 2001, net production decreased approximately 14.9% in terms of barrels of crude oil equivalent due to the sale in 2001 of all of our production assets in the United Kingdom and eight of our production assets in the United States, as well as the normal decline in production of our mature fields in Angola. The following table provides information on the allocation of our international development activities for the three years ended December 31, 2002, 2001 and 2000.

ALLOCATION OF INTERNATIONAL DEVELOPMENT ACTIVITIES

	2002	2001	2000
South America ⁽¹⁾	74.0%	70.0%	74.0%
West Coast of Africa	23.1	16.8	4.1
Gulf of Mexico	2.9	11.0	16.9
North Sea ⁽²⁾	0.0	2.2	5.0
Total	100.0%	100.0%	100.0%

(1) Includes Argentina, Bolivia, Colombia and, through 1999, Ecuador and excludes Brazil.

(2) We sold our interests in the North Sea in 2001.

Bolivian Activities

In January 2001, we inaugurated our first natural gas producing field in Bolivia, the Sábalo gas field, where Petrobras Bolivia is the operator and has a 35% equity stake (the other partners are Petrolífera Andina (50%) and Total Bolivia (15%)). In 2002, we drilled two additional appraisal wells in the Sábalo field.

At the end of 2001, we began construction of the Yacuiba-Rio Grande gas pipeline (GASYRG), a pipeline in Bolivia that connects the gas fields in the south of Brazil to the Bolivia-Brazil pipeline. We completed construction of the pipeline in the beginning of 2003. The pipeline, along with the construction of two compression stations, is expected to increase the current flow of natural gas from the San Antonio and Sábalo fields into the Bolivia-Brazil gas pipeline to 815 million cubic feet per day.

We also entered into several 20-year agreements for the importation of natural gas from Bolivia to be sold to natural gas distribution companies in Brazil.

As part of the Bolivian gas transport infrastructure, we acquired an interest in a natural gas compression plant in Rio Grande, Bolivia, which has a capacity to compress up to 840 million cubic feet per day. As a result of certain improvements to this plant, we expect that this capacity will increase to up to 1,200 million cubic feet per day by the middle of 2003 (1,590 million cubic feet per day, including stand-by capacity).

The Bolivian refining and distribution market are regulated by the Bolivian government. On January 25, 2003, the government issued a decree which reduced refining margins. We are working with the Bolivian government and crude oil suppliers to attempt to convince the Bolivian government to restore our refining margins.

African Activities

For the first time, as a result of the 2000 license bid round in Nigeria, we will act as operator in the deepwater Niger Delta block in Nigeria. In addition, in December 2001, we entered into three joint ventures for oil exploration and production in deepwater blocks off the coast of Nigeria. In one of these blocks, we have a 75% interest and we are the operator. We are currently appraising Agbami and Akpo, two fields previously discovered in the Niger Delta Basin.

Gulf of Mexico Activities

Our wholly-owned Subsidiary, Petrobras America, Inc. (PAI) continues to expand its activities in the Gulf of Mexico through farm-in agreements (by which PAI, rather than obtaining an interest directly from the relevant government authorities, acquires an interest from a party who has already obtained such interest), and participation in leases and sales conducted by the United States Minerals

Management Service. As of December 31, 2002, PAI held participation in 110 offshore blocks in the Gulf of Mexico, of which 90 are located in deep and ultra-deep waters.

PAI holds a 25% working interest in the Cascade discovery well drilled in the Walker Ridge area, Block WR-206, which is operated by BHP Billiton. PAI also holds a 33% interest in the Jedi block, which is operated by Kerr-McGee. In 2002, PAI also successfully drilled and brought into production an exploratory well in Block GB-201 in the Garden Banks area.

Argentine Activities

Perez Companac

Terms of Acquisition

On October 17, 2002, we agreed to acquire 58.62% of the capital stock of Perez Companac S.A., the second largest Argentine energy company, from the Perez Companac family and the Perez Companac Foundation. We paid the Perez Companac family and the Perez Companac Foundation a total of approximately U.S.\$1.03 billion, consisting of U.S.\$689.2 million in cash and U.S.\$338.4 million in debt securities issued by our wholly-owned subsidiary, PIFCo, and which will pay a 4.75% annual coupon and mature on October 4, 2007. We also agreed to acquire from the Perez Companac family 39.67% of the capital stock of Petrolera Perez Companac S.A, a company engaged in hydrocarbons production in Argentina's Neuquén basin, for U.S.\$49.8 million in cash.

The completion of the Perez Companac acquisition was contingent upon antitrust approval from the Argentine Government's Comisión Nacional de Defensa de la Competencia (the National Council for the Defense of Competition or the CNDC). We received approval from the CNDC on May 13, 2003. Upon approval, Perez Companac agreed to divest itself of its aggregate equity interest in Transener S.A., which operates most of Argentina's high-tension electricity lines. This divestiture is in line with Perez Companac's strategic plan and does not affect our strategic plan in Latin America.

Because the transaction had not received final approval from the CNDC at December 31, 2002, we did not consolidate Perez Companac's 2002 financial statements into our 2002 consolidated financial statements. We expect to consolidate Perez Companac's financial statements into our consolidated financial statements by June 30, 2003.

On April 4, 2003, the shareholders of Perez Companac and Pecom Energía approved the change of Perez Companac S.A.'s corporate name to Petrobras Energía Participaciones S.A. and Pecom Energía S.A.'s corporate name to Petrobras Energía S.A.

Perez Companac Selected Financial Information

Perez Companac is an integrated energy company engaged in oil and gas exploration and production, refining, petrochemicals, electricity generation, transmission and distribution and hydrocarbons marketing and transportation activities. It conducts operations in Argentina, Bolivia, Brazil, Ecuador, Peru and Venezuela.

Approximately 59.6% of Perez Companac's total crude oil and natural gas production and 45.6% of its proved crude oil and natural gas reserves were located in Argentina at December 31, 2002. Production from Venezuela accounted for approximately 28.7% of Perez Companac's total average production in barrels of oil equivalent in 2002, constituting the largest operation outside Argentina.

Perez Companc prepares its financial statements in accordance with generally accepted accounting principles in Argentina (Argentine GAAP), which differ in significant respects with U.S. GAAP. Perez Companc also presents its results of operation in Argentine Pesos. The following table sets forth, for the periods indicated, the high, low, average and period-end exchange rates for the purchase of U.S. dollars, expressed in nominal pesos per U.S. dollar:

EXCHANGE RATE OF PESOS PER U.S. \$1.00

	Low	High	Average⁽¹⁾	Period-end
Year Ended December 31				
1998-2001	1.00	1.00	1.00	1.00
2002	1.40	3.90	3.11	3.37
Month Ended				
January 31, 2003	3.10	3.35	3.26	3.21
February 28, 2003	3.11	3.21	3.16	3.19
March 31, 2003	2.88	3.21	3.06	2.98
April 30, 2003	2.82	2.96	2.89	2.82
May 31, 2003	2.77	2.94	2.84	2.87

Source: Banco de la Nación Argentina

(1) Represents the daily average exchange rate during each of the relevant periods.

As of December 31, 2002, Perez Companc had total consolidated assets of P\$13.6 billion, total consolidated outstanding indebtedness of P\$8.7 billion and shareholders' equity of P\$4.8 billion. The company registered a net loss of P\$1.2 billion for the fiscal year ended December 31, 2002, principally as a result of the devaluation of the Argentine Peso, the worsening of the economic and financial crisis in Argentina and the political and economic instability in Venezuela.

The table below presents selected consolidated financial information from the income statement of Perez Companc for the year ended December 31, 2002:

INCOME STATEMENT DATA

	For the Year Ended December 31, 2002 (in millions of Argentine Pesos)
Net sales	P\$ (4,521)
Gross profit	1,699
Operating income ⁽¹⁾	1,285
Financial expense and holding losses	(1,332)
Net loss	(1,192)

(1) Reflects gross profit, administrative and selling expenses, exploration expenses and equity in operating earnings of affiliates.

The table below presents selected consolidated financial information from the balance sheet of Perez Companc as of December 31, 2002:

BALANCE SHEET DATA

	As of December 31, 2002 (in millions of Argentine Pesos)
Current assets:	P\$2,812
Non-current assets	10,767
Total assets	P\$13,579
Short-term debt	P\$1,221
Long-term debt	6,064
Other liabilities	1,392
Total liabilities	8,677
Total shareholders' equity	4,778
Total liabilities and stockholders' equity	P\$13,579

Business Outlook

During the year ended December 31, 2002, Perez Companac's business was adversely affected by the severe economic and financial crises in Argentina, and in particular:

losses from the company's equity investments in utility companies, resulting from the pesification of utility rates, which combined with the devaluation of the Argentine Peso, made it difficult for these companies to service their indebtedness, which is primarily denominated in U.S. dollars; and

the impact of the peso devaluation, which led to a net loss of P\$6.4 billion, which was partially offset by a P\$5.9 billion gain from the effect of inflation on its significant borrowing position.

As a result of the Argentine economic crisis and its effect on Perez Companac, the company could not obtain investor financing and relied exclusively on its cash generation, which led to significant cuts in capital expenditures during the year ended December 31, 2002. Faced with significant liquidity constraints, the company completed a U.S.\$1,694 million renegotiation of its indebtedness in order to bring principal payments in line with cash flow provided by operations and establish a more manageable debt maturity schedule.

Perez Companac's business was also negatively affected during the fourth quarter of 2002 by the political and economic crisis in Venezuela, which resulted in decreased oil production and cash flow.

Oil and Gas Exploration and Production

As of December 31, 2002, Perez Companac had proved reserves of 593,878 thousand barrels of crude oil and natural gas liquids, and 1,313,244 million cubic feet (37,187 million cubic meters) of natural gas. Total production for the year ended December 31, 2002 was 172.4 thousand barrels of oil equivalent per day (crude oil production totaled 118.9 thousand barrels per day and natural gas production totaled 321.3 million cubic feet or 9.09 million cubic meters per day). Perez Companac's reserves to production ratio was 13.2 years, as of December 31, 2002.

Santa Fe Acquisition

On October 24, 2002, we acquired Petrolera Santa Fe, an Argentine oil company and subsidiary of Devon Energy Corporation, for U.S.\$89.6 million. Petrolera Santa Fe produces approximately 6,040 barrels of crude oil per day and approximately 22,672,016 cubic feet (642,000 cubic meters) of natural gas per day. As of December 31, 2002, Petrolera Santa Fe had estimated proved reserves of 81.3 Mmboe, estimated in accordance with the criteria established by the Society of Petroleum Engineers (SPE).

Repsol Asset Swap

On December 17, 2001, we entered into an exchange of equally-valued assets with Repsol-YPF, Europe's sixth largest crude oil company. We exchanged some of our operating assets in Brazil for some of YPF's operating assets in Argentina. The transaction closed on December 26, 2001. As a result of this transaction, we increased our downstream activities in the Southern Cone region of South America and acquired over 99% of the total capital stock of Eg3 S.A., the fourth-largest oil product marketing company in Argentina. In 2002, Eg3 S.A. accounted for approximately 10.4% of Argentina's automotive fuels market, with total sales of approximately 0.7 million gallons per day, through approximately 618 service stations and a refinery with a production capacity of 30,500 barrels per day. In exchange, Repsol-YPF received a 30% stake in our Alberto Pasqualini refinery in the State of Rio Grande do Sul, with a refining capacity of 189,000 barrels per day, and which both companies expect to be the target of sizeable additional joint strategic investments. Repsol-YPF also acquired from us the right to resell fuels at 234 service stations in the Midwest, South and Southeast regions of Brazil, with aggregate sales of approximately 8,386 barrels per day. In addition, Repsol-YPF acquired a 10% stake, or the equivalent of approximately 5.2 million barrels of proved crude oil reserves and 2.2 billion cubic feet of proved natural gas reserves, in our Albacora Leste offshore oil field in the Campos Basin.

No cash was exchanged in the deal because the transaction consisted of an exchange of equally-valued assets. Under the terms of the agreement, the value of the assets that we acquired has been protected under the structure for a period of eight years so as to minimize, for both parties, the foreign currency risk resulting from the present economic situation in Argentina.

For the year ended December 31, 2002, we sold approximately 81 million cubic feet per day of gas in Argentina. As a result of the devaluation of the Peso in Argentina, our revenues from these sales have decreased as reflected in U.S. dollars.

Others

The MEGA project is a joint venture among us, Repsol-YPF and Dow Chemical to fractionate natural gas liquids. We are obligated under an off-take contract to take minimum volumes of LPG and natural gas, if delivered, at market prices. The sponsors provided a completion guarantee for their respective shares in the project (Repsol-YPF 38%; Petrobras 34% and Dow Chemical 28%) until June 30, 2003. In 2002, two bank loans in the aggregate amount of U.S.\$48 million were replaced by intercompany loans from sponsors.

The MEGA project has been adversely affected by the crisis in Argentina, particularly the peso devaluation, which affected the ability of Compañía Mega to service its debt. As a result, we are in the process of negotiating new pricing arrangements and sponsor guarantees. We asked sponsors to extend their corporate guarantees so that Argentina's declaration of a moratorium on its sovereign debt would not be considered an event of default with respect to Compañía Mega's debt obligations. Dollar denominated bank loans (U.S.\$48 million) were replaced by subordinated debt from shareholders in order to take advantage of the lower exchange rate. In addition, sponsors decided to renegotiate prices of natural gas and ethane and to address unfair price advantages among sponsors.

Organizational Structure

The following diagram sets forth our 12 direct subsidiaries:

All of our 12 direct subsidiaries are incorporated under the laws of Brazil, except PIFCo, Petrobras International Braspetro B.V. (PIB BV), Braspetro Oil Company (BOC), Braspetro Oil Services Company (Brasoil) and Petrobras Netherlands B.V. (PNBV), which were incorporated abroad. We own at least 99.99% of the common shares of those subsidiaries and at least 98% of the preferred shares of Petroquisa, Gaspetro and BR. PIFCo, Transpetro, Downstream Participações S.A. and Petrobras Negócios Eletrônicos S.A. (E-Petro) do not have preferred shares. In May 2002, we created Petrobras Energia Ltda., a wholly owned subsidiary, which will act as a power trader and conduct various activities related to Petrobras investments in the Brazilian power sector.

Restructuring of International Business Segment

In order to increase operational efficiency, we are in the process of restructuring our international operations. At an extraordinary general shareholders meeting held on September 30, 2002, our shareholders approved the absorption by us of Braspetro, a subsidiary which formerly managed all of our international operations, and which operated through the following direct subsidiaries:

Braspetro Oil Services Company (Brasoil), a company incorporated in the Cayman Islands, which provides oil services in several segments of the oil industry and engages in the sale of crude oil and oil products; and

Petrobras America (PAI), a company incorporated in Delaware, which is responsible for conducting our operations in the Gulf of Mexico.

As part of this restructuring, which we initiated in September 2002 and expect to complete at the end of 2003, we directly control or will directly control the following entities:

Braspetro Oil Services Company (Brasoil), a company incorporated in the Cayman Islands, which provides oil services in several segments of the oil industry and engages in the sale of crude oil and oil products;

Braspetro Oil Company (BOC), a company incorporated in the Cayman Islands, which will be temporarily responsible for managing our operations in Kazakhstan, Trinidad and Tobago and Venezuela;

Petrobras International Braspetro B.V. (PIB BV), a company incorporated in the Netherlands, which will manage most of our international upstream and downstream assets; and

Petrobras Netherlands B.V. (PNBV), a company incorporated in the Netherlands, which we directly control since January 2003 and which engages in leasing activities.

Property, Plant and Equipment

Under Brazilian law, the Brazilian government owns all crude oil and natural gas reserves within Brazil, and we have certain rights to exploit those reserves pursuant to concessions. Substantially all of our property, consisting of refineries and storage, production, manufacturing and transportation facilities, is located in Brazil.

Health, Safety and Environmental Matters

The protection of human health and the environment is one of our primary concerns, and is essential to our success as an integrated oil, gas and energy company. In order to address and prioritize health and safety concerns and ensure compliance with environmental regulations, we have:

developed the PEGASO program (scheduled to be concluded in December 2003), to upgrade our pipelines and other equipment, implement new technologies, improve our emergency response readiness, reduce emissions and residues and prevent environmental accidents. As of December 31, 2002, we had made capital expenditures of approximately US\$1.6 billion under this program, including US\$360 million expended through the *Programa de Integridade de Dutos* (Pipeline Integrity Program) through which we conduct inspections of, and improvements to, our pipelines. We are committed to make capital expenditures of approximately US\$1.9 billion through 2003 in connection with PEGASO, including US\$0.6 billion through the Pipeline Integrity Program;

proposed the execution of, or entered into, environmental commitment agreements with several environmental protection agencies and/or the federal or state public ministries, in which we agree to undertake certain measures in order to complete the environmental licensing for several of our operating facilities;

integrated our corporate health department into the already existing corporate environment and safety department, thereby facilitating the development of systematic, company-wide procedures to handle health, safety and environmental (HSE) concerns;

established our HSE policy, which focuses on principles of sustainable development, compliance with legislation and the availability and use of environmental performance indicators;

undertaken capital investments to reduce the HSE risk of our operations, including making improvements to our refineries and transportation facilities and developing and implementing oil pollution prevention guidelines to which our employees adhere;

built environmental protection centers and advanced bases for oil spill prevention, control and response, established local and regional onshore and offshore contingency plans to deal with hazardous product spills, chartered dedicated vessels fully equipped for oil spill control and fire fighting (in 2002, we recorded one of the lowest volumes of oil leakages in our history: 52,000 gallons, as compared to 691,000 gallons in 2001 and 1,580,000 gallons in 2000); and

received integrated HSE certificates for all our operating units (by December 2002, 38 of our operating units had been certified by the management systems standards ISO 14001 (environment), and BS 8800 or OHSAS 18001 (health and safety), and the *Frota Nacional de*

Petroleiros (National Fleet of Vessels) has been fully certified by the IMO International Management Code for Safe Operation of Ships and for Pollution Prevention (ISM Code) since December 1997).

In addition, we conduct environmental impact studies for new projects as required by Brazilian environmental legislation, and our HSE department evaluates each and every project with a budget exceeding US\$25 million to confirm its compliance with all HSE requirements.

We will continue to evaluate and develop initiatives to address HSE concerns and to reduce our exposure to HSE risks.

See below and Item 8 Financial Information and Item 5 Environmental Proceedings and Liabilities for additional information.

Environmental Liabilities

Since January 1, 2000, we have experienced several accidents, including 11 significant oil spills causing the release of approximately 1.9 million gallons of crude oil and 0.1 million gallons of naphtha into various waterways. Due to those accidents, we are currently subject to several administrative, civil and criminal investigations and proceedings. We cannot predict whether additional litigation will result from those accidents and whether any such additional proceedings will have a material adverse effect on us. We have made provisions of US\$50 million to meet probable and reasonably probable losses in the event of unfavorable rulings against us, including the matters described in Item 8 Financial Information Legal Proceedings.

On January 18, 2000, a pipeline connecting one of our terminals to a refinery in Guanabara Bay ruptured, causing a release of approximately 341,000 gallons of crude oil into the bay. We undertook action to control the spill in an effort to prevent the oil from threatening additional areas. We have spent approximately R\$104 million in connection with the clean-up efforts and fines imposed by IBAMA in connection with this spill. We are also subject to several investigations and civil and criminal proceedings as a result of this spill, including:

a criminal proceeding instituted on January 24, 2001 by the Public Ministry of the State of Rio de Janeiro, which we are contesting;

a criminal complaint filed against us, our former president and nine other employees by the Federal Public Ministry in São João de Meriti. On April 30, 2002, the Judge determined that we could not appear as a defendant in this criminal proceeding as a result of an injunction we obtained from the court, although the decision is still subject to appeal. The complaint against our former president was dismissed, although this decision is also subject to appeal;

262 individual lawsuits filed by fishermen of the State of Rio de Janeiro claiming damages in an aggregate amount of approximately R\$41 million. Approximately half of the cases brought so far have been decided against us; and

a lawsuit filed by the Federation of Fishermen of the State of Rio de Janeiro claiming damages of approximately R\$537 million. On February 7, 2002, the judge hearing this matter found that damages were due, but not in the amount claimed. Both parties appealed this decision. On October 8, 2002, the Court of Appeals of the State of Rio de Janeiro denied the appeal filed by the plaintiff and dismissed the claim with respect to all fishermen who had already settled their claims against us or who had already filed individual lawsuits against us, and also with respect to certain other fishermen. These dismissals dramatically reduced the

number of plaintiffs who could possibly be entitled to damages. On February 17, 2003, we filed motions for special and extraordinary remedies which are now pending review by higher courts.

On July 16, 2000, an oil spill occurred at our President Getúlio Vargas refinery, located approximately 15 miles (24 kilometers) from Curitiba, capital of the State of Paraná, releasing approximately 1.06 million gallons of crude oil into the surrounding area. We spent approximately R\$74 million on the clean-up effort and fines imposed by the State of Paraná authorities. In addition, in relation to this spill:

on August 1, 2000, IBAMA imposed fines in the amount of R\$168 million. We contested these fines, but IBAMA subsequently upheld them. On February 3, 2003, we filed a lawsuit in order to challenge these fines and obtained an injunction that allows us to do so without posting a bond in the amount of the fines. We are currently awaiting a final disposition of this case;

on January 1, 2001, the Federal Public Ministry and the Paraná State Public Ministry filed a public civil action against us seeking damages of approximately R\$2,300 million. On April 4, 2001, we filed our response and are currently awaiting a decision;

Instituto Ambiental do Paraná (the State of Paraná Environmental Institute, or IAP) filed a civil action against us. We are currently awaiting a decision;

the Federal Public Ministry instituted a criminal action against us, our former president and our former superintendent of the REPAR refinery. We are currently awaiting a decision; and

the *Associação de Defesa do Meio Ambiente de Araucária* (Association for the Environmental Defense of Araucária, or AMAR) filed a civil action against us. We are currently awaiting a decision.

On November 4, 2000, the Cypriot flag vessel *Vergina II* chartered by us collided with a pier at our terminal in São Sebastião Ilhabela, causing the release of approximately 22,719 gallons of crude oil into the São Sebastião canal. We concluded the clean up of the spill on November 8, 2000. As a result of the accident, the environmental agency of the State of São Paulo imposed a fine of R\$7 million and the environmental agency of Ilhabela imposed a fine of R\$46 million. We are currently contesting these fines on the basis that the Cypriot company was responsible for the navigation of the ship into the terminal.

On February 16, 2001, our Araucária-Paranaguá pipeline ruptured as a result of an unusual movement of the soil and spilled approximately 15,059 gallons of fuel oil into the Sagrado, Meio, Neves and Nhundiaquara rivers located in the State of Paraná. We finalized the cleaning of the river surfaces on February 20, 2001, recovering approximately 13,738 gallons of fuel oil. Environmental teams are still assessing the environmental impact of the spill. As a result of the accident:

IAP fined us approximately R\$150 million. We contested this fine, and IAP partially accepted our defense for the purpose of reducing the fine to R\$90 million. We are contesting this reduced fine;

the Federal Public Ministry and the Paraná State Public Ministry filed a public civil action against us seeking damages of approximately R\$3,700 million and to oblige us to take certain remedial steps to prevent future accidents. On July 19, 2002, we filed our response and are currently awaiting a decision; and

the State of Paraná is currently conducting a criminal investigation, which is in its initial stages.

On March 15, 2001, a gas explosion inside one of the columns of the P-36 production platform, located in the Roncador field (75 miles off the Brazilian coast) caused the loss of 11 employees and led to flooding of the column and part of the pontoon, which resulted in the capsizing and sinking of the platform on March 20, 2001. The accident also caused 396,300 gallons of oil to spill into the ocean. The spill was controlled through oil recovery in a first phase and with chemical and mechanical dispersion in a second phase. As a result of the accident:

the Federal Public Ministry filed a lawsuit on January 23, 2002 seeking the payment of R\$100 million as environmental damages, a fine of R\$1 million if we do not adapt our existing platforms and implement precautions in future platforms so that no process gas pipes run through the stabilizing columns, a daily fine of R\$0.2 million if within six months from the decision we do not install gas sewers detectors inside columns and pontoons of semi-submersible platforms located in the Campos Basin and a daily fine of R\$0.3 million if we do not implement an appropriate contingency plan. We have presented our defense to these claims and are awaiting a decision;

IBAMA fined us approximately R\$7 million, the basis of which we are contesting through administrative proceedings; and

on March 17, 2001, the *Capitania dos Portos* (Port Authority) imposed a fine of R\$0.5 million, which we have already paid.

On May 30, 2001, there was a rupture in a pipeline which transported crude oil from Barueri to the Paulínia Refinery, in São Paulo, causing the leak of 52,826 gallons of crude oil. We assumed responsibility for the accident and began repair work immediately, which we completed in August 2001.

On October 18, 2001, the ship Norma collided with a rock in the Paranaguá Port causing a leak of 103,158 gallons of naphtha. In response to this spill, the Port Authority fined Transpetro R\$50,000 and IBAMA fined Transpetro R\$5 million. Transpetro has already paid the Port Authority fine and is contesting the fine imposed by IBAMA. The Federal Public Ministry has also initiated a criminal complaint related to this accident.

On May 13, 2002, Transpetro's ship Brotas released approximately 4,000 gallons of crude oil into the Ilha Grande Bay. As a result of the accident, *Comissão Estadual de Controle Ambiental* (State Environmental Control Commission, or CECA) fined us approximately R\$7 million, and the municipalities of Angra dos Reis and Mangaratiba fined us approximately R\$10 million each. We are contesting both fines.

On September 14, 2002, a fire in the Ilha Grande Bay Terminal caused the release of approximately 300 gallons of crude oil into the Ilha Grande Bay. As a result of the accident, *Comissão Estadual de Controle Ambiental* (State Environmental Control Commission, or CECA) fined us approximately R\$1 million. We are contesting this fine.

On October 13, 2002, a power blackout in FPSO P-34, which is located in the Barracuda-Caratinga fields, and the failure of back-up generators affected the ship's water balance system and caused water to move from storage tanks located in one side of the ship to the tanks located in the opposite side, causing the FPSO to roll up to an angle of 40 degrees. Four days later, the stability of the ship had been restored, without casualties or spill of oil into the sea. As a result of the investigation of this accident, several measures to prevent similar accidents were incorporated into our Programa de Excelência Operacional-PEO (Operational Excellence Program). We estimate that total lost production

resulting from the interruption of P-34's operations represented 0.44% of our average daily production in 2002. As a result of the accident:

CECA fined us R\$1 million for allegedly operating the platform without the required environmental license. We are contesting this fine;

IBAMA imposed on us one-time fines totaling R\$39.0 million and daily fines totaling R\$0.3 million per day for non-compliance based on a number of different allegations, including that we were operating 33 platforms in the Campos Basin without the required environmental licenses and conducting our drilling activities in violation of environmental laws and regulations. We are contesting these fines. On December 23, 2002, IBAMA and our company executed a *Termo de Ajustamento de Conduta* (Agreement for Regularization of Conduct), or TAC, relating to our production activities in the Campos Basin, pursuant to a Presidential Decree enacted on December 12, 2002;

on January 16, 2003, the Federal Public Ministry filed a motion for a protective order with a request for an injunction against us, IBAMA and *Agência Nacional do Petróleo* (National Petroleum Agency, or ANP), in order to challenge the validity of the letter of intent and of the TAC and prevent us from obtaining from IBAMA new licenses for our platforms located in the Campos Basin. The trial judge partially accepted the plaintiff's request for an injunction. We subsequently presented our defense to the motion and appealed the judge's decision on the request for injunction. A Chamber of the Brazilian Federal Court of Appeals for the Second Circuit suspended the injunction, upholding the validity of the TAC. The proceedings at the trial court should continue until the trial judge makes a decision on the merits of the complaint, which decision would be subject to further appeals; and

in connection with the aforementioned motion for a protective order, on February 20, 2003, the Federal Public Ministry filed a public civil action against us, IBAMA and *Agência Nacional do Petróleo* (National Petroleum Agency, or ANP), also to challenge the validity of the letter of intent and of the TAC and prevent us from obtaining new licenses for our platforms located in the Campos Basin from IBAMA. We have presented our defense, and the proceedings will continue.

In November 2002, a failure in the operational system of the Henrique Lage Refinery (REVAP), in São José dos Campos caused the release of smoke from LPG and gasoline into the atmosphere. As a result of the accident, *Companhia de Tecnologia de Saneamento Ambiental* (Environmental Sanitation Technology Company, or CETESB) fined us approximately R\$0.2 million. We have already paid this fine.

Also in 2002, we paid several fines to CETESB totaling approximately R\$3.8 million, mostly for emissions from the Paulínia (REPLAN) and Presidente Bernardes - Cubatão (RPBC) refineries.

On May 12, 2003, there was a rupture in an oilfield gathering pipeline located in the Fazenda Belém Field, in Ceará, causing the leak of 1,850 gallons of crude oil. As a result of the accident, *Superintendência de Meio Ambiente do Estado do Ceará* (Environmental Secretariat of the State Ceará, or SEMACE) fined us R\$0.1 million. On May 29, 2003, we and SEMACE executed a *Termo de Compromisso*, an agreement pursuant to which we will take the steps necessary to prevent future accidents, collect and properly dispose of the crude oil and residues released and present to SEMACE a plan of environmental recovery for the area affected by the accident. SEMACE in turn agreed to consider a reduction of up to 90% in the amount of the fine.

On June 3, 2003, the tanker Nordic Marita released approximately 6,600 gallons of crude oil into the São Sebastião Canal. As a result of the accident, IBAMA fined us R\$0.5 million. We are currently reviewing the matter in order to decide how to proceed.

Regulation of the Oil and Gas Industry in Brazil

Regulatory Framework

Under Brazilian law, the Brazilian government owns all crude oil and natural gas reserves in Brazil. Additionally, Article 1 of Law No. 2,004 of 1953 granted the Brazilian government a monopoly over the research, exploration, production, refining and transportation of crude oil and oil products in Brazil and its continental shelf, subject only to the right of companies engaged in crude oil refining and the distribution of oil products at that time to continue those activities. Under Article 2 of Law No. 2,004, the Brazilian government made us its exclusive agent for purposes of exploiting the Brazilian government's monopoly. In 1988, when it adopted the Brazilian Constitution, the Brazilian Congress incorporated Article 1 of Law No. 2,004 into the Constitution and included within the scope of the Brazilian government's monopoly the importation and exportation of crude oil and oil products.

Beginning in 1995, the Brazilian government undertook a comprehensive reform of the country's oil and gas regulatory system. On November 9, 1995, the Brazilian Congress amended the Brazilian Constitution to authorize the Brazilian government to contract with any state or privately-owned company to carry out the activities related to the upstream and downstream segments of the Brazilian oil and gas sector. Accordingly, this amendment eliminated our government-granted monopoly. The amendment was implemented by the adoption of the Oil Law, which revoked Law No. 2,004.

The Oil Law provided for the establishment of a new regulatory framework, ending our exclusive agency and enabling competition in all aspects of the oil and gas industry in Brazil. As a result of this constitutional amendment and the subsequent and ongoing implementation of the changes under the Oil Law, its amendments and related regulations, we have been operating in an environment of gradual deregulation and increasing competition.

The Oil Law also created an independent regulatory agency, the ANP. The ANP's function is to regulate the oil and natural gas industry in Brazil. A primary objective of the ANP is to create a competitive environment for oil and gas activities in Brazil that will lead to the lowest price and best services for consumers. Among its principal responsibilities is to regulate concession terms for upstream development and award new exploration concessions. See Item 10 Additional Information Material Contracts Concession Agreements with the ANP.

The Oil Law granted us the exclusive right to exploit the crude oil reserves in all fields where we had previously commenced production, in accordance with the concession agreement entered into with the ANP on August 6, 1998. For each concession area, we were granted an exclusivity period of 27 years as of the date the field was declared to be commercially profitable. The Oil Law also established a procedural framework for us to claim exclusive exploratory and, in case of drilling success, development rights for a period of up to three years with respect to areas where we could demonstrate that we had established prospects prior to the enactment of the Oil Law. In order to perfect our claim to explore and develop these areas, we had to demonstrate that we had the required financial capacity to carry out these activities, either alone or through other cooperative arrangements.

Each year we are required to submit our budget for the following fiscal year to the Ministry of Planning, Budget and Management and the Ministry of Mines and Energy. Once reviewed by those offices, the budget is then submitted to the Brazilian Congress for approval. As a result of this process,

the total level of our capital expenditures for each fiscal year is regulated, although the specific application of funds is left to our discretion. Since mid-1991, we have obtained substantial amounts of our financing from the international capital markets, mainly through the issuance of commercial paper and short, medium and long-term notes, and have increasingly been able to raise long-term funds for large capital expenditure items such as rigs and platforms.

Our strategic objectives and planning are subject to supervision by the Ministry of Planning, Budget and Management. Our activities are also subject to regulation by the Ministry of Finance and the Ministry of Mines and Energy, among others. In addition, since our common and preferred shares are traded on the São Paulo Stock Exchange, we are also regulated by the CVM.

Brazil is not a member of OPEC, but we have been invited to attend OPEC meetings as an observer. Therefore, neither Brazil nor we are bound by OPEC guidelines. However, to the extent that OPEC influences international crude oil prices, our prices are affected, as our prices are linked to international crude oil prices.

Price Regulation

Until the passage of the Oil Law in 1997, the Brazilian government had the power to regulate all aspects of the pricing of crude oil, oil products, fuel alcohol and other energy sources in Brazil, including natural gas and energy. Following the implementation of the Oil Law through December 31, 2001, the Brazilian oil and gas sector was significantly deregulated and the Brazilian government changed its price regulation policies. Under these new regulations the Brazilian government:

introduced a new methodology for determining our net operating revenues that is designed to track prevailing international prices and the Real/U.S. dollar exchange rate;

eliminated regulation of the cost at which we could record imported crude oil and oil products in our cost of sales;

gradually eliminated controls on wholesale prices at which we could sell our oil products, except for diesel, gasoline and LPG;

eliminated transportation cost equalization subsidies known as *Frete para Uniformização de Preços* (Freight for the Uniformity of Prices, or FUP), in the case of transportation subsidies for oil products, and *Frete para Uniformização de Preços do Alcool* (Freight for the Uniformity of Prices of Alcohol, or FUPA), in the case of transportation subsidies for fuel alcohol effective after July 28, 1998; and

continued to require that we act as the Brazilian government's administrator for the fuel alcohol program.

As set forth below, pursuant to Law No. 9,990, on January 2, 2002, the Brazilian government eliminated price controls for crude oil and oil products, except for the natural gas sold for qualifying thermoelectric plants. This led to increased competition and further price adjustments, as other companies were allowed to participate in the Brazilian market and import and export crude oil, oil products and natural gas to and from Brazil.

Prices remain regulated, however, for certain natural gas sales contracts, electricity and certain petrochemicals. On August 19, 2002, the ANP directed us to reduce prices of LPG for residential use by 12.4%, and we effected such reduction. The ANP eliminated this price control on October 31, 2002.

To permit the taxation of all imported crude oil, oil products and natural gas in conjunction with the opening of the market to all participants, the Brazilian government, pursuant to Constitutional Amendment No. 33, as of December 11, 2001, enacted Law No. 10,336, dated December 19, 2001, establishing a tax of a fixed amount to be applied with respect to the sale and import of crude oil, oil products and natural gas products (*Contribuição de Intervenção no Domínio Econômico*, Contribution for Intervention in the Economic Sector, or CIDE), amended by Decree No. 4,066, dated December 27, 2001 and No. 4,565, dated January 1, 2003. On December 30, 2002, the Brazilian government enacted Law No. 10,636, amended by Decree No. 4,565, dated January 1, 2003, which increased the fixed amount of CIDE.

Crude Oil and Refined Oil Products

Until enactment of the Oil Law, the Brazilian government regulated all aspects of the pricing of crude oil and oil products in Brazil, from the cost of crude oil imported for use in our refineries, to the price of refined oil products charged to the consumer. The regulation of oil product prices was one of the tools available to the Brazilian government for controlling inflation. Prior to the enactment of the Oil Law, we regularly requested price adjustments in Reais to maintain prices at or above domestic inflation, and to cover the cost of importing crude oil and oil products at prevailing international prices. During periods of high inflation, the Brazilian government frequently did not increase prices in order to keep them at international levels. From July 29, 1998 until December 31, 2002, the decision to increase prices rested with the Minister of Mines and Energy, after he had consulted with the Minister of Finance.

The deregulation process occurred over time, with the prices of the following products being deregulated prior to January 2, 2002:

- anhydrous fuel alcohol (May 1997);
- solvent and paraffin (October 1997);
- kerosene (November 1997);
- lubricants (December 1997);
- hydrated fuel alcohol (February 1999);
- naphtha (August 9, 2000);
- jet fuel in refineries (July 1, 2001); and
- fuel (November 1, 2001).

From July 29, 1998 until December 2001, we were required to calculate our net operating revenues based on the *preço de realização* (realization price, or PR), for oil products we sold. PR was determined on the basis of a pricing formula established by the Brazilian government that, with a lag of approximately one month, reflected changes in the Real/U.S. dollar exchange rate, international market prices for the relevant benchmark products and applicable import tariffs. Net operating revenues is the sum of the products obtained by multiplying the realization price for each oil product by the volume of each such oil product sold. The amount obtained from subtracting net operating revenues from sales of products and services (net of value-added and other taxes on sales and services) was recorded as the *Parcela de Preços Específica* (Specific Price Portion, or PPE), which was presented as an adjustment to sales of products and services. The amount of PPE for any period increased or decreased the balance of

the Petroleum and Alcohol Account, and this process resulted in a decrease or increase in our net available cash.

The Brazilian government continued to reimburse certain fuel transportation and other eligible costs to us and distributors (including BR), until December 2001. Thereafter, we received the right to reimbursement for coastal and pipeline transportation costs of fuel oil and LPG, and distributors (including BR) continued to receive reimbursement for transportation costs of aviation fuel, diesel, LPG and fuel oil to certain municipalities in the Northern and Midwestern regions of Brazil. The impact of our role as administrator of these subsidies was reflected in the Petroleum and Alcohol Account (described below) on our balance sheet and in increases or decreases in that account on our statement of cash flows. The funds we and BR were entitled to receive as reimbursement for transportation costs under these subsidies reduced the amounts we recorded in selling, general and administrative expenses in respect of transportation costs, thus increasing the Petroleum and Alcohol Account.

On January 4, 2001, the Ministry of Mines and Energy and the Ministry of Finance adopted a new methodology for establishing the prices we were required to charge for diesel, gasoline and LPG. Under this methodology, the prices for these oil products were adjusted by an index (*Indice de Reajuste*, or IR), on a quarterly basis, calculated on the basis of a formula that reflects changes in the Real/U.S. dollar exchange rate and the prevailing international prices of Brent crude during the preceding quarter. If the IR was positive, the Brazilian government had discretion to establish an increase in price for any of these oil products lower than that which would result from application of the readjustment factor. If the IR was negative, the Brazilian government had discretion to establish a smaller price decrease for a product that would result from application of the readjustment factor if the average PPE for the product during the preceding quarter was negative.

Pursuant to the Oil Law and subsequent legislation, the oil and gas markets in Brazil were deregulated beginning January 2, 2002. As part of this action:

the Brazilian government deregulated sales prices for crude oil and oil products, and, as a consequence, the formula for realization prices and the PPE were eliminated; and

the Brazilian government established the CIDE, a per-transaction payment to the Brazilian government required to be paid by producers, blenders and importers upon sales and purchases of specified oil and fuel products at a set amount for different products based on the unit of measurement typically used for such products.

Natural Gas

We continue to comply with a number of rules relating to the natural gas industry, including *Portaria* No. 3 (relating to the sale of domestic natural gas), *Portaria* No. 176 (relating to the maximum price for natural gas sold to certain PPT thermoelectric plants) and *Portaria* No. 45 (relating to the transportation price for domestic natural gas sold to local gas distribution companies).

On June 1, 2001, the Ministry of Mines and Energy and the Ministry of Finance adopted *Portaria* No. 176, establishing a ceiling price for natural gas to be sold to certain of the thermoelectric plants that are part of the PPT, to be applicable for a twelve-year period. Each qualifying thermoelectric plant will have the right to purchase natural gas at prices that are determined as described below.

For the initial consecutive twelve-month period starting on the date the gas consumption begins, a fixed price in Reais will be set based on the reference price in United States dollars per MMBTU, initially set at U.S.\$2.58 per MMBTU, converted into Reais based on the exchange rate in effect on that date. For subsequent consecutive twelve-month periods, the ceiling price will be adjusted annually for changes in

the United States producer price index and the U.S. dollar exchange rate with respect to the portion of the ceiling price relating to imported natural gas (set by the regulation at 80%) and for changes in the IGP-M with respect to the portion of the ceiling price relating to domestic natural gas (set by the regulation at 20%), reflecting the current mix of natural gas supplied to these qualifying thermoelectric plants. The annual adjustment in the ceiling price related to imported gas is based on the previous twelve-month period rate and the projected volume of natural gas to be sold to the qualifying thermoelectric plant during the succeeding twelve-month period. The price will be adjusted to reimburse the natural gas supplier, on a per invoice basis, for any shortfalls caused by a Real devaluation. Similarly, the qualifying thermoelectric plant will be reimbursed for overpayments, calculated on a per invoice basis, resulting from a Real appreciation during the period.

The applicable interest rate on the net shortfall or overpayment amount with respect to each qualifying thermoelectric plant will be the SELIC rate, the interest rate applicable to bonds issued by the Brazilian government. In addition, interest projected to be accrued during the immediately succeeding twelve-month period on the net shortfall or overpayment amount will be added. Any portion of the shortfall or overpayment amount that is not reimbursed through these adjustments in the ceiling price will be included in the adjustment to the ceiling price for subsequent consecutive twelve-month periods until reimbursed in full.

The PPT allows qualifying thermoelectric plants to pass on to their customers any increases in pricing resulting from these adjustments.

Hydrated Alcohol

Until December 31, 2002, we occasionally purchased and sold hydrated alcohol at the direction of the Brazilian government through government auctions and recorded the net effect of our fuel alcohol commercialization activities as an increase or decrease to the Petroleum and Alcohol Account, with an offsetting adjustment to cost of sales. The ANP, pursuant to Administrative Rule 301, dated December 18, 2001, authorized us to export, either in its natural state, or mixed with gasoline, the portions of inventory of fuel alcohol in our possession that were not purchased in connection with the *Conselho Interministerial do Açúcar e do Alcool* (Interministerial Council of Sugar and Alcohol, or CIMA). In addition, the Brazilian government is considering ways to facilitate our disposition of fuel alcohol inventories acquired by us through December 31, 2002.

The Petroleum and Alcohol Account

Prior to 2002, the Petroleum and Alcohol Account was a special account maintained to reflect the impact on us of the Brazilian government's regulatory policies for the Brazilian oil industry and its fuel alcohol program.

Prior to July 29, 1998, this account recorded the difference between the cost established by the Brazilian government and our actual cost for imported crude oil and oil products, as well as the net effects on us of the administration of the FUP and FUPA subsidies and all of the related regulations (the FUP/FUPA programs). The excess of the amounts we paid under the FUP/FUPA programs over the amount of FUP/FUPA we collected in any month increased the Petroleum and Alcohol Account. Conversely, the excess of the amounts we collected under the FUP/FUPA programs over the amounts we paid under the FUP/FUPA programs in any month decreased the Petroleum and Alcohol Account. In connection with the settlement of the Petroleum and Alcohol Account, the Brazilian government has been certifying the balance of the Petroleum and Alcohol Account since March 31, 1992.

From July 29, 1998 until December 31, 2001, the Petroleum and Alcohol Account was required to be adjusted by the PPE and certain fuel transportation and other reimbursable costs that had not been

phased out. If recorded net operating revenues for any period were less than the amount recorded in sales of products and services (net of value-added and other taxes on sales and services) for such period, PPE was a positive amount and the balance of the Petroleum and Alcohol Account decreased. Conversely, if net operating revenues for any period exceeded the amount recorded in sales of products and services (net of value-added and other taxes on sales and services) for such period, the balance of the Petroleum and Alcohol Account increased. In addition, during this period, the net impact on us of our fuel alcohol commercialization activities was also recorded in the Petroleum and Alcohol Account. Finally, we were also required to fund the administrative expenses of the ANP. These funding payments were made after determination by the Brazilian government and were recorded as an increase in the Petroleum and Alcohol Account and did not impact our income statement.

Article 74 of the Oil Law required settlement of the Petroleum and Alcohol Account by the Brazilian government on or before full implementation of price deregulation was completed. This deregulation was phased in over several years and was implemented in full on January 2, 2002. To facilitate the required settlement, on June 30, 1998, the Brazilian government issued National Treasury Bonds Series H in our name, which were placed with a federal depository to support the balance of this account. These bonds are not tradable and are redeemable only at their maturity in 2003. The Series H bonds have been cancelled from time to time by the depository, pursuant to our authorization, as the balance of the Petroleum and Alcohol Account decreased. We have no other rights to use, withdraw or transfer the Series H bonds before maturity in 2003.

From the issuance of the Series H bonds until September 30, 1999, the balance of the Petroleum and Alcohol Account decreased by U.S.\$3,999 million as a result of the collection of the PPE, net of transportation subsidies. The collection of PPE was positive due to relatively low international oil product prices as compared to the sales prices established by the Brazilian government for our oil products. Accordingly, a corresponding amount of Series H bonds was cancelled.

From October 1, 1999 until December 31, 2000, our net operating revenues generally exceeded the amount recorded in sales of products and services, net of value-added and other taxes on sales and services, due to high international prices for oil products that were not fully reflected in the sales prices we were allowed to charge for our oil products during such period. As a result, PPE was negative during this period and the balance of the Petroleum and Alcohol Account increased.

During 2001, the balance of the Petroleum and Alcohol Account decreased by U.S.\$1,428 million, mainly as a result of the positive collection of the PPE and a reduction of U.S.\$405 million in connection with the certification of the balance of the account by the interministerial working group, as discussed below.

During 2002, the balance of the Petroleum and Alcohol Account increased by U.S.\$101 million, mainly as a result of a provision of U.S.\$259 million relating to expenses incurred in connection with Article 7 of Law No. 10,453, of May 13, 2002, which includes the Sugar Cane Cost Equalization Program in the Northeast Region as well as the receipt of credits and settlement of debts relating to events prior to December 31, 2001, as established by ANP.

The value of the outstanding Series H bonds was U.S.\$46 million as of December 31, 2002, U.S.\$92 million as of December 31, 2001 and U.S.\$ 1,062 million as of December 31, 2000. The balance of the Petroleum and Alcohol Account was U.S.\$182 million as of December 31, 2002, U.S.\$81 million as of December 31, 2001 and U.S.\$1,509 million as of December 31, 2000.

Certification of the Petroleum and Alcohol Account

In September 1999, the Ministers of Finance, Agriculture, Internal Supply and Mines and Energy created a working group to certify the balance of the Petroleum and Alcohol Account for the period from April 1, 1992 to June 30, 1998. In December 2000, the working group concluded its certification process on a portion of the activity for this period, and we agreed to reduce the balance of the Petroleum and Alcohol Account by U.S.\$106 million. The adjustments we accepted primarily related to differences in the calculation of the FUP/FUPA and the procedures used to determine the difference between our actual and the regulated cost of imported crude oil and oil products, both of which were eliminated with the implementation of new regulations on July 29, 1998. In December 2001, we received the final report on the audit by the interministerial working group for the 1992-1998 period. In addition to the U.S.\$106 million adjustment arising from the certification completed in December 2000, the interministerial working group report included new recommendations to deduct U.S.\$405 million from the Petroleum and Alcohol Account. In response to these recommendations, we agreed to reduce the balance of the Petroleum and Alcohol Account by the following adjustments:

a reduction of U.S.\$36 million to the balance of the account, resulting from a change of our procedures for calculating the profit on sales of fuel alcohol;

a reduction of U.S.\$140 million to the balance of the account, resulting from a change of our methodology for recording reimbursements, to reflect amounts disallowed by the working group, mainly relating to transportation of oil products and fuel alcohol by sea, pipeline, road and rail, and port charges; and

a reduction of U.S.\$229 million in the balance of the account, resulting from a change of our methodology for calculating interest on the Petroleum and Alcohol Account for the period from September 1994 through June 1996.

On April 19, 2002, the ANP Director adopted *Portaria* No. 50, which established a commission to audit the activity recorded in the Petroleum and Alcohol Account for the period from July 1, 1998 through December 31, 2001. This audit proceeding started on May 27, 2002, the results of which will be the basis for the required settlement of the balance of the account with the Brazilian government. The changes in the Petroleum and Alcohol Account in the period July 1, 1998 to December 31, 2002 are subject to audits by the ANP, and in November 2002, the ANP recommended, and we agreed, to reduce the balance of the Petroleum and Alcohol Account by U.S.\$29 million. The settlement of accounts with the Federal Government should have been completed by December 31, 2002, according to the provisions of Law No. 10453 of May 13, 2002, amended by Decree No. 4491 of November 29, 2002. As of the date of this annual report, settlement has not been effected. We are in constant contact with the ANP and the *Secretaria do Tesouro Nacional* (the National Treasury, or STN) in order to effect settlement of the account.

Since we have implemented all recommendations made by the interministerial working group, we do not expect significant additional adjustments to be necessary as a result of the audit by the ANP.

In accordance with the applicable laws and regulations, and subject to our approval, the settlement of the Petroleum and Alcohol Account may be in the form of:

a transfer to us of an amount of Series H bonds equal to the balance of the Petroleum and Alcohol Account on the settlement date;

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issuance of new instruments (the types and terms of which will be determined by the Brazilian government at or before the time of settlement, subject to our approval) in an amount equal to the balance of the Petroleum and Alcohol Account on the settlement date;

offset of the remaining balance of the Petroleum and Alcohol Account on the settlement date against other amounts owed by us to the Brazilian government, such as federal taxes payable; or

a combination of the foregoing.

The following table summarizes the changes in the Petroleum and Alcohol Account for the years ended December 31, 2002, 2001 and 2000:

	For the Year Ended December 31,		
	2002	2001	2000
	(in millions of U.S. dollars)		
Opening balance	\$ 81	\$ 1,509	\$ 1,352
Advances (Collections) PPE	(6)	(969)	288
Reimbursements to third parties:			
Subsidies paid to fuel alcohol producers	235	45	
Others	24	17	19
Total reimbursements to third parties	259	62	19
Reimbursements to Petrobras:			
Transport of oil products	(6)	45	81
Net result of fuel alcohol commercialization activities ⁽¹⁾		68	(19)
Total reimbursements to Petrobras	(6)	113	62
Total reimbursements	253	175	81
Financial income	2	16	35
Results of certification/audit process conducted by the Brazilian government ⁽²⁾	(29)	(405)	(106)
Translation loss ⁽³⁾	(119)	(245)	(141)
Ending balance	\$ 182	\$ 81	\$ 1,509

(1) Recorded as a component of cost of sales.

(2) For the year ended December 31, 2002, U.S.\$29 million, for the year ended December 31, 2001, U.S.\$405 million and for the year ended December 31, 2000, U.S.\$105 million was recorded as a component of other expenses, net, and U.S.\$1.0 million in 2000 was recorded as a component of monetary and exchange variation on monetary assets and liabilities, net.

(3) Translation losses are recorded as a component of cumulative translation adjustments.

Exploration and Development Regulation

During the time we had a government-granted monopoly in Brazil for oil and gas operations, we had the right to exploit all production, exploration and development areas in Brazil. When our government-granted monopoly was terminated, the Brazilian government was allowed to contract with any state or privately owned company for the development of the upstream and downstream segments of the Brazilian oil and gas sector. Before establishing bidding rounds for concessions, the Brazilian government granted us the exclusive right to exploit crude oil reserves where we had previously commenced operations. In 1998, the ANP started to conduct bidding rounds to grant concessions for production, exploration and development areas, and we were required to compete for concessions.

With the effectiveness of the Oil Law and the regulations promulgated by the ANP thereunder, concessionaires were required to pay the government the following:

signature bonuses;

rentals for the occupation or retention of areas;

special participation; and

royalties.

The minimum signature bonuses are published in the bidding rules for the concessions being auctioned, but the actual amount is based on the amount of the winning bid and must be paid upon the execution of the concession agreement.

The rentals for the occupation and retention of the concession areas are provided for in the related bidding rules and are payable annually. For purposes of calculating rentals, the ANP takes into consideration factors such as the location and size of the relevant concession block, the sedimentary basin and its geological characteristics.

Special participation is an extraordinary charge we must pay in the event of high production volumes and/or profitability from our fields, according to criteria established by applicable regulation, and is payable on a quarterly basis for each field from the date on which extraordinary production occurs. This participation rate, whenever it is due, varies between 0% and 40% depending on:

volume of production; and

whether the block is onshore or offshore and, if offshore, whether it is shallow or deep water.

Under the Oil Law and applicable regulations, the special participation is calculated based upon quarterly net revenues of each field, which consist of gross revenues less:

royalties paid;

investment in exploration;

operational costs; and

depreciation adjustments and applicable taxes.

The ANP is also responsible for determining monthly royalties payable with respect to production. Royalties generally correspond to a percentage ranging between 5% and 10% applied to reference prices for oil or natural gas, as established in the relevant bidding guidelines (*edital de licitação*) and concession contract (*contrato de concessão*). Virtually all of our production currently pays the maximum 10% rate. In determining the royalties applicable to a particular concession block, the ANP takes into consideration, among other factors, the geological risks involved and the production levels expected.

The Oil Law also requires concessionaires of onshore fields to pay to the owner of the land a special participation fee that varies between 0.5% and 1.0% of the net operating revenues derived from the production of the field.

Environmental Regulations

All phases of the crude oil and natural gas business present environmental risks and hazards. Our facilities in Brazil are subject to a wide range of federal, state and local laws, regulations and permit requirements relating to the protection of human health and the environment. At the federal level, we are subject to the administrative authority of the Brazilian Institute for the Environment and Renewable Natural Resources, or IBAMA, and to the regulatory authority of the *Conselho Nacional do Meio*

Ambiente (National Council for the Environment). Law No. 6,938 of August 31, 1981, and subsequent regulations and decrees established strict liability for environmental damage, mechanisms for enforcement of environmental standards and licensing requirements for polluting activities. On December 27, 2000, Law No. 10,165, modifying Law No. 6,938, created the *Taxa de Controle e Fiscalização Ambiental* (Environmental and Fiscalization Control Tax, or TCFA). The new law empowers IBAMA to collect, on a quarterly basis, certain fees from us and other companies that meet a minimum revenue threshold, are engaged in potentially environmentally damaging activities and/or are exploiting natural resources within Brazil. At present, we do not consider this fee imposed by IBAMA to be material. The *Confederação Nacional da Indústria* (Brazilian Industry Confederation, or CNI), is currently contesting these fees as unconstitutional. Any other fees imposed by IBAMA in the future, however, may have a material adverse effect on us.

Brazilian environmental laws and regulations provide for restrictions and prohibitions on spills and releases or emissions of various hazardous substances produced in association with our operations. Brazilian environmental laws and regulations also govern the operation, maintenance, abandonment and reclamation of wells, refineries, terminals, service stations and other facilities. Compliance with these laws and regulations can require significant expenditures, and violations may result in fines and penalties, some of which may be material. In addition, operations and undertakings that have a significant environmental impact, especially the drilling of new wells and expansion of refineries, require us to apply for environmental impact assessments in accordance with federal and state licensing procedures. In accordance with Brazilian environmental laws, we have proposed the execution of, or we have entered into, environmental commitment agreements with the environmental protection agencies and/or the federal or state public ministries, in which we agree to undertake certain measures in order to complete the environmental licensing for several of our operating facilities.

Under Law No. 9,605 of February 12, 1998, individuals or entities whose conduct or activities cause harm to the environment are subject to criminal and administrative sanctions, as well as any costs to repair the actual damages resulting from such harm. Individuals or legal entities that commit a crime against the environment are subject to penalties and sanctions that range from fines to imprisonment, for individuals, or, for legal entities, suspension or interruption of activities or prohibition to enter into any contracts with governmental bodies for up to ten years. The government environmental protection agencies may also impose administrative sanctions on those who do not comply with the environmental laws and regulations, including, among others:

fines;

partial or total suspension of activities;

obligations to fund recovery works and environmental projects;

forfeiture or restriction of tax incentives or benefits;

closing of the establishments or undertakings; and

forfeiture or suspension of participation in credit lines with official credit establishments.

As a result of our spill in the Guanabara Bay, on January 27, 2000, the National Council for the Environment enacted Resolution No. 265 of the Brazilian National Council for the Environment imposing an obligation on IBAMA and the state environmental agencies, local environmental agencies and non-governmental agencies, to evaluate the control and prevention measures and environmental licensing status of all industrial facilities for the production of crude oil and oil products in Brazil within 240 days from the enactment of the resolution. Resolution No. 265 also required us to perform, within a six-month

period, an independent environmental audit in all of our industrial installations located in the State of Rio de Janeiro. Finally, Resolution No. 265 required all companies with activities related to the production of crude oil and oil products in Brazil to submit to the National Council for the Environment, within 180 days, a plan and schedule for the implementation of independent environmental audits in all of their respective plants located in Brazil. On August 8, 2000, we filed our plan and schedule for the implementation of independent environmental audits with the National Council for the Environment for our plants in Brazil. In November 2001, all of our operating units had concluded their environmental audits as required by Resolution No. 265, except for BR, which due to the large number of its installations is scheduled to conclude its environmental audits by December 2003.

Under Law No. 9,966 of 2000, entities operating organized ports and port installations and owners or operators of platforms and its support installations must perform independent environmental audits every two years, with a view to evaluating the environmental management and control systems in their units. We are in full compliance with this law.

Law No. 9,985 establishes an environmental compensation of at least 0.5% of the value of a project relating to activities that have a negative environmental impact that cannot be mitigated. This compensation may only be applied in conservation units. Environmental agencies are still implementing this law, but they may attempt to apply it in a retroactive manner.

Competition

As a result of the deregulation of the oil and gas industry in Brazil, we expect to face increasing competition both in our downstream and upstream operations.

In our exploration and production segment, the Brazilian government's auction process for new exploratory areas has enabled multinational and regional oil and gas companies to begin exploring for crude oil in Brazil. If these companies discover crude oil in commercial quantities and are able to develop it economically, we expect that competition with our own production will increase.

In the past, we have faced little competition as a result of the prevailing laws that effectively gave us a monopoly. With the end of this monopoly and full deregulation, other participants may now transport and distribute products in Brazil. As a result, we expect these participants to begin importing refined oil products, which will compete with oil products from our Brazilian refineries, as well as the oil products we currently import. We will now have to compete with global imports at international prices. We expect that this additional competition may affect the prices we can charge for our oil products, which in turn will affect the profit we can make.

We also expect continued competition in our distribution segment, where we currently face the most significant competition of any of our business segments. In particular, we face competition from small distributors, many of which have been able, and may continue to be able, to avoid paying sales taxes and mix their gasoline with inexpensive solvents, enabling them to sell gasoline at prices below ours.

In our natural gas and power segment, we expect competition from new entrants that are acquiring interests in natural gas distribution and thermoelectric generation companies, and existing competitors that are expanding operations in order to consolidate their position in Brazil.

In our international segment, we are planning to expand our operations, although we expect to face continuing competition in the areas in which we are already active, including the Gulf of Mexico, Africa and the Southern Cone.

Insurance

Our insurance programs principally focus on the concentration of risks and the importance and replacement value of assets. Under our risk management policy, risks associated with our principal assets, such as refineries, tankers and offshore production and drilling platforms, are insured for their replacement value with third-party Brazilian insurers. Although the policies are issued in Brazil, most of our policies are reinsured abroad with reinsurers rated A or higher by Standard & Poor's rating agency. Other assets, such as small auxiliary boats, certain storage facilities, and some administrative installations, are self-insured. We do not maintain coverage for business interruption. Since November 2000, we maintain coverage for operational third-party liability with respect to our onshore and offshore activities, including oil spills. Although we do not insure our pipelines, we have insurance against damage or loss resulting from oil spills from our pipelines.

The premiums we paid in 2002 were distributed as follows: 48.6 % to coverage of our offshore assets, 31.1% to coverage of our onshore assets, 7.9 % to coverage of third-party liability, 3.8 % to coverage of risks associated with transportation, 2.8 % to hull and machinery risk coverage and 5.8 % to coverage for other risks. Over 30.5% of our annual insurance coverage relates to the domestic and international transportation of crude oil, products and materials. All projects and installations under construction are insured in compliance with the terms of the relevant financing agreements, usually through a performance bond in connection with completion of the contract and/or other damage and liability insurance.

In November 2002, we signed a one-year general risk insurance contract that covers environmental risk. The insurance policy covers any damage resulting from either our or our affiliates' activities, with the exception of Petrobras Internacional S.A., or Braspetro, which has its own insurance and is therefore not included in this policy. Under our insurance policy, the total covered amount of onshore and offshore risk is up to U.S.\$250 million per incident and in the aggregate. This insurance policy, however, does not cover any fines that may be imposed on us or our affiliates. Although we believe that we are currently in compliance in all material respects with all applicable environmental laws, regulations and requirements, future environmental costs, including those related to past operations, may have a material adverse effect on our financial condition or results of operations.

The premium for renewing our general risk insurance policy for a 12-month period commencing June 2003 was U.S.\$30.5 million, net of taxes. This represented a decrease of 34.4% over the preceding 12-month period. The decrease was primarily due to changes to our risk management and health, safety and environmental policies.

Following the sinking of Platform P-36, and as a result of the risks inherent in our operations, deductibles have increased and may increase up to U.S.\$20 million per accident for our platforms and refineries.

Following the terrorist attacks in the United States, the insurance premiums charged for war risk and terrorism coverage increased significantly and may increase further prior to renewal, or the coverage may be unavailable in the future. We received a notice of cancellation of our war risk and terrorism insurance in December 2001. We subsequently were able to purchase war risk and terrorism insurance covering important assets in Brazil that we consider more susceptible to war and terrorism risk.

In October 2002, the Brazilian Supreme Court declared unconstitutional a bill that had been approved by Congress that provided for the privatization of *IRB-Brasil Resseguros S.A.*, or IRB, and which would have deregulated the Brazilian re-insurance market. We cannot predict if and when Congress will approve a new bill on the matter. Therefore, we do not expect that our insurance costs will be reduced by the opening of the Brazilian re-insurance market to competition in the near term.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion of our financial condition and results of operations together with our audited consolidated financial statements and the accompanying notes beginning on page F-2 of this annual report.

General

We are one of the world's largest integrated oil and gas companies. As of December 31, 2002, our estimated worldwide net proved crude oil and natural gas reserves were approximately 10.5 billion barrels of crude oil equivalent. During 2002, our average domestic production was 1.5 million barrels per day of crude oil and NGLs and 1.7 billion cubic feet per day of natural gas, and our average international production was approximately 35,224 barrels per day of crude oil and NGLs and 138 million cubic feet per day of natural gas. Our domestic refining capacity totals 1.93 million barrels per day of crude oil, which constitutes 98.6% of the Brazilian refining capacity. In 2002, approximately 79% of the crude oil feedstock for our refinery operations was supplied by our domestic production. During 2002, our consolidated net sales totaled approximately 911,817 million barrels of crude oil equivalent, generating net operating revenues of U.S.\$22,612 million. See Sales Volumes and Prices. In our efforts to become a fully integrated natural gas and power company, we are capitalizing on our natural gas assets and have positioned ourselves to be a significant participant in Brazil's thermoelectric power industry.

We earn income from:

domestic sales, which consist of sales of crude oil and oil products (such as gasoline, diesel fuel and liquefied petroleum gas), natural gas and petrochemical products;

export sales, which consist primarily of sales of crude oil and oil p