

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:**

<b>Title of each class:</b>	<b>Name of each exchange on which registered:</b>
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.

Item 17  Item 18

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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.

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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)					
<b>Assets</b>					
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
<b>Total current assets</b>	<b>10,197</b>	<b>14,326</b>	<b>12,526</b>	<b>8,167</b>	<b>6,251</b>
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
<b>Total other assets</b>	<b>3,263</b>	<b>2,860</b>	<b>6,843</b>	<b>6,702</b>	<b>10,520</b>
<b>Total assets</b>	<b>\$32,018</b>	<b>\$36,864</b>	<b>\$39,136</b>	<b>\$33,733</b>	<b>\$38,954</b>
<b>Liabilities and stockholders equity</b>					
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
<b>Total current liabilities</b>	<b>6,945</b>	<b>8,044</b>	<b>9,640</b>	<b>9,811</b>	<b>8,191</b>
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
<b>Total long-term liabilities</b>	<b>15,908</b>	<b>15,494</b>	<b>14,638</b>	<b>12,963</b>	<b>15,121</b>
Minority interest	(136)	79	153	237	351
<b>Stockholders equity</b>					
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
<b>Total stockholders equity</b>	<b>9,301</b>	<b>13,247</b>	<b>14,705</b>	<b>10,722</b>	<b>15,291</b>

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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 <sup>(1)</sup>	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 <sup>(2)</sup>	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 <sup>(3)</sup>	(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: <sup>(4)</sup>					
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 <sup>(1)</sup>	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
<b>2003</b>				
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 <sup>(1)(3)</sup>	Ended December 31, 2001 <sup>(1)(3)</sup>
	(in acres)		(boe per day) <sup>(2)</sup>	
<b>Brazil<sup>(1)</sup></b>				
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
<b>Total Brazil</b>	<b>3,006,919</b>	<b>254,757</b>	<b>1,751,927</b>	<b>1,567,907</b>
<b>International</b>	<b>566,368</b>	<b>216,014</b>	<b>58,171</b>	<b>68,391</b>
<b>Total</b>	<b>3,573,287</b>	<b>470,771</b>	<b>1,810,098</b>	<b>1,636,298</b>

(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	
	_____	_____	_____	_____
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
	_____	_____	_____	_____
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	
	_____	_____	_____	_____
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)
	_____	_____	_____	_____
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	
<b>2002</b>	<b>Net Exploratory Wells Drilled</b>	19	21	16	4	60
	Successful	4	2	5	3	14
	Unsuccessful	15	19	11	1	46
	<b>Net Development Wells Drilled</b>	20	10	247	7	284
	Successful	20	10	238	7	275
	Unsuccessful	0	0	9	0	9
<b>2001</b>	<b>Net Exploratory Wells Drilled</b>	14	37	36	6	93
	Successful	4	6	9	3	22
	Unsuccessful	10	31	27	3	71
	<b>Net Development Wells Drilled</b>	41	9	294	11	355
	Successful	40	5	283	11	339
	Unsuccessful	1	4	11	0	16
<b>2000</b>	<b>Net Exploratory Wells Drilled</b>	17	12	20	7	56
	Successful	1	1	7	4	13
	Unsuccessful	16	11	13	3	43
	<b>Net Development Wells Drilled</b>	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
<b>Land rigs for onshore exploration and development</b>	16	4	42	0	16	0
Owned	12	0	17	0	12	0
Leased	4	4	25	0	4	0
<b>Semi-submersible rigs</b>	20	0	22	22	20	22
Owned	4	0	4	13	4	13
Leased	16	0	18	9	16	9

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<b>Drill ships</b>	5	0	11	0	13	0
	—	—	—	—	—	—
Owned	4	0	0	0	0	0
Leased	1	0	11	0	13	0
<b>Jack-up rigs</b>	5	0	6	1	5	1
	—	—	—	—	—	—
Owned	5	0	4	1	4	1
Leased	0	0	2	0	1	0
<b>Moduled rigs for offshore exploration and development</b>	4	0	10	6	5	5
	—	—	—	—	—	—
Owned	4	0	7	0	4	0
Leased	0	0	3	6	1	5
	—	—	—	—	—	—
<b>Total</b>	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
<b>Crude Oil and NGL Production (in Mbpd)<sup>(1)</sup></b>			
Brazil			
Offshore			
Campos Basin	1,217	1,053	992
Other	40	44	49
	<u>1,257</u>	<u>1,097</u>	<u>1,041</u>
Onshore	243	239	230
	<u>1,500</u>	<u>1,336</u>	<u>1,271</u>
Total Brazil	1,500	1,336	1,271
International	35	43	53
	<u>1,535</u>	<u>1,379</u>	<u>1,324</u>
<b>Crude Oil and NGL Average Sales Price (U.S. dollars per Bbl)</b>			
Brazil	\$ 22.30	\$ 19.89	\$ 26.07
International	23.00	22.32	26.37
<b>Natural Gas Production (in Mmcfpd)<sup>(2)</sup></b>			
Brazil			
Offshore			
Campos Basin	690	601	576
Other	213	219	228
	<u>903</u>	<u>820</u>	<u>804</u>
Total offshore	903	820	804
Onshore	609	572	522
	<u>1,512</u>	<u>1,392</u>	<u>1,326</u>
Total Brazil	1,512	1,392	1,326
International	138	150	126
	<u>1,650</u>	<u>1,542</u>	<u>1,452</u>
<b>Total natural gas production</b>			
	<u>1,650</u>	<u>1,542</u>	<u>1,452</u>
<b>Natural Gas Average Sales Price (U.S. dollars per Mcf)</b>			
Brazil	\$ 1.22	\$ 1.39	\$ 1.49
International	1.34	2.35	2.29
<b>Aggregate Average Lifting Costs (oil and natural gas) (U.S. dollars per boe)</b>			
Brazil <sup>(3)</sup>	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 (MMboe)
	Natural		Combined <sup>(2)</sup> (MMboe)	Natural		Combined <sup>(2)</sup> (MMboe)	
	Crude Oil (MMbbl)	Gas <sup>(1)</sup> (Bcf)		Crude Oil (MMbbl)	Gas <sup>(1)</sup> (Bcf)		
<b>Net Proved Developed and Undeveloped Reserves:</b>							
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 <sup>(3)</sup>	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
<b>Net Proved Developed Reserves:</b>							
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)					
<b>Brazil</b>						
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
<b>Total offshore</b>	<b>7,992.6</b>	<b>3,241.0</b>	<b>6,826.3</b>	<b>3,248.8</b>	<b>7,409.4</b>	<b>3,139.7</b>
Onshore	840.7	671.9	826.5	650.6	818.0	641.1
<b>Total Brazil</b>	<b>8,833.2</b>	<b>3,912.9</b>	<b>7,652.8</b>	<b>3,899.4</b>	<b>8,227.4</b>	<b>3,780.8</b>
<b>International</b>						
Other South America <sup>(1)</sup>	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 <sup>(2)</sup>	0.0	0.0	0.0	0.0	20.8	7.6
<b>Total international</b>	<b>121.7</b>	<b>94.7</b>	<b>96.0</b>	<b>66.6</b>	<b>128.9</b>	<b>80.1</b>
<b>Total</b>	<b>8,955.0</b>	<b>4,007.6</b>	<b>7,748.8</b>	<b>3,966.0</b>	<b>8,356.3</b>	<b>3,860.9</b>

(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)					
<b>Brazil</b>						
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
<b>Total Brazil</b>	<b>7,327.8</b>	<b>3,892.5</b>	<b>6,885.3</b>	<b>3,946.0</b>	<b>6,266.8</b>	<b>3,614.3</b>
<b>International</b>						
Other South America <sup>(1)</sup>	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 <sup>(2)</sup>	0.0	0.0	0.0	0.0	35.0	32.9
<b>Total international</b>	<b>2,145.0</b>	<b>2,043.9</b>	<b>2,162.2</b>	<b>1,336.8</b>	<b>2,173.2</b>	<b>1,368.4</b>
<b>Total</b>	<b>9,472.9</b>	<b>5,936.4</b>	<b>9,047.5</b>	<b>5,282.8</b>	<b>8,440.0</b>	<b>4,982.7</b>

(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 <sup>(1)</sup>	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 <sup>(2)</sup>	40	18	42	40	17	42	40	14	35
Ricardo Eliçabe <sup>(3)</sup>	31	29	97	31	0 <sup>(4)</sup>	97			
Guilherme Elder Bell <sup>(2)</sup>	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)	
<b>Product</b>						
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
<b>Total</b>	<b>1,640.8</b>	<b>100.0</b>	<b>1,646.4</b>	<b>100.0</b>	<b>1,569.8</b>	<b>100.0</b>

## 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

	2002	2001	2000
	Volume (%)	Volume (%)	Volume (%)
<b>Region</b>			
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
<b>Total</b>	100.0%	100.0%	100.0%

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

(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<sup>(1)</sup>

	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
<b>Total</b>	<b>188,554.9</b>	<b>127,829</b>	<b>88,661</b>

(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
<b>Total</b>	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)		
<b>Product</b>			
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
<b>Total</b>	<b>798.2</b>	<b>761.4</b>	<b>753.4</b>
<b>Customer</b>			
<b>Wholesalers</b>			
Diesel	110.6	111.6	165.5
Gasoline	46.6	46.7	85.9
Other	32.4	34.7	132.3
<b>Total wholesalers</b>	<b>189.6</b>	<b>193.0</b>	<b>383.7</b>
<b>Retail distributors</b>			
BR	158.0	146.0	139.5
Third parties	450.6	422.4	230.2
<b>Total retail distributors</b>	<b>608.6</b>	<b>568.4</b>	<b>369.7</b>
<b>Total customers</b>	<b>798.2</b>	<b>761.4</b>	<b>753.4</b>

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**

	<b>2002</b>	<b>2001</b>	<b>2000</b>
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
<b>Total</b>	<b>32.9%</b>	<b>32.8%</b>	<b>32.0%</b>

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 <sup>(1)</sup>
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) <sup>(2)</sup>	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 <sup>(1)</sup>
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) <sup>(1)</sup>	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<sup>(1)</sup>

	2000	2001	2002	2003	2004	2005	Yearly Average after 2005 <sup>(2)</sup>
(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 <sup>(3)</sup>	0	0	25	217	343	343	343
<b>Total</b>	<b>394</b>	<b>563</b>	<b>866</b>	<b>1,443</b>	<b>1,707</b>	<b>1,822</b>	<b>1,936</b>
Estimated Contract Payments (U.S.\$ Million) <sup>(4)</sup>	\$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<sup>(1)</sup>**

	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
<b>Total Commitments</b>	<b>1550</b>	<b>3125</b>	<b>3685</b>	<b>3685</b>	<b>3388</b>	<b>2495</b>	<b>2255</b>

(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 <sup>(1)</sup>	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 <sup>(2)</sup>	0.0	1.7	3.5
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(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 <sup>(1)</sup>	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 <sup>(2)</sup>	0.0	2.2	5.0
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(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**

	<b>Low</b>	<b>High</b>	<b>Average<sup>(1)</sup></b>	<b>Period-end</b>
<b>Year Ended December 31</b>				
1998-2001	1.00	1.00	1.00	1.00
2002	1.40	3.90	3.11	3.37
<b>Month Ended</b>				
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**

	<b>For the Year Ended December 31, 2002 (in millions of Argentine Pesos)</b>
Net sales	P\$ (4,521)
Gross profit	1,699
Operating income <sup>(1)</sup>	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**

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

*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), Brapetro 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 20, 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
<b>Total reimbursements to third parties</b>	<b>259</b>	<b>62</b>	<b>19</b>
Reimbursements to Petrobras:			
Transport of oil products	(6)	45	81
Net result of fuel alcohol commercialization activities <sup>(1)</sup>		68	(19)
Total reimbursements to Petrobras	(6)	113	62
<b>Total reimbursements</b>	<b>253</b>	<b>175</b>	<b>81</b>
Financial income	2	16	35
Results of certification/audit process conducted by the Brazilian government <sup>(2)</sup>	(29)	(405)	(106)
Translation loss <sup>(3)</sup>	(119)	(245)	(141)
<b>Ending balance</b>	<b>\$ 182</b>	<b>\$ 81</b>	<b>\$ 1,509</b>

(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 products;

international sales (excluding export sales), which consist of sales of crude oil, natural gas and oil products that are produced and refined abroad; and

other sources, including services, investment income and foreign exchange gains.

Our operating expenses include:

costs of sales (which is comprised of labor expenses, costs of operating and purchases of crude oil and oil products); maintaining and repairing property, plants and equipment; depreciation and amortization of fixed assets and depletion of oil fields; and costs of exploration;

selling (which include expenses for transportation and distribution of our products), general and administrative expenses; and

interest expense and foreign exchange losses.

Year to year fluctuations in our income are the result of a combination of factors, including:

the volume of crude oil, oil products and natural gas we produce and sell;

changes in international prices of crude oil and oil products, which are denominated in U.S. dollars;

related changes in domestic prices of crude oil and oil products, which are denominated in Reais;

Brazilian inflation;

fluctuations in the Real/U.S. dollar exchange rate; and

the amount of taxes and duties that we are required to pay with respect to our operations, by virtue of our status as a Brazilian company and our involvement in the oil and gas industry.

#### **Sales Volumes and Prices**

The profitability of our operations in any particular accounting period is related to the sales volume of, and prices for, the crude oil, oil products and natural gas that we sell. Our consolidated net sales in 2002 totaled approximately 911,817 million barrels of crude oil equivalent, representing U.S.\$22,612 million in net operating revenues, as compared to approximately 862,009 million barrels of crude oil equivalent and U.S.\$24,549 million in net operating revenues in 2001 and approximately 817,992 million barrels of crude oil equivalent and U.S.\$26,955 million in net operating revenues in 2000.

As a vertically integrated company, we process most of our crude oil production in our refineries and sell the refined oil products primarily in the Brazilian domestic market. Therefore, it is oil product prices, rather than crude oil prices, that most directly affect our financial results.

Oil product prices vary over time as the result of many factors, including the price of crude oil. The average prices of Brent crude, an international benchmark oil, were approximately U.S.\$25.02 per barrel for 2002, U.S.\$24.44 per barrel for 2001 and U.S.\$28.50 per barrel for 2000. For December 2002, Brent crude oil prices averaged U.S.\$28.67 per barrel, but during 2003 (through May), Brent crude oil prices have increased, averaging U.S.\$29.85 per barrel. This increase in average crude oil prices also affected international prices for oil products.

#### *Domestic Sales Volumes and Prices*

During 2002, approximately 76.0% of our net operating revenues were derived from sales of crude oil and oil products in Brazil, as compared to 84.3% in 2001 and 87.0% in 2000. As export volumes of crude oil and oil products have increased, domestic sales as a percentage of net operating revenues have declined.

Until January 2, 2002, the Brazilian government established prices at which we were allowed to sell our oil products in Brazil. From July 1998 through 2001, our net operating revenues for domestic sales were determined based on a realization price, calculated pursuant to a pricing formula established by the Brazilian government. This formula was designed to reflect the international prices in U.S. dollars for relevant benchmark products, as adjusted for exchange rate variations for the prior month and transportation differentials to Brazil. The pricing formula was intended to transition the Brazilian market to international price levels for oil products in anticipation of the full price deregulation that occurred on January 2, 2002. See Item 4 Information on the Company Regulation of the Oil and Gas Industry in Brazil Price Regulation.

The difference between the actual gross sales prices we charged (net of taxes and charges) and the net operating revenues based on realization prices, the PPE, was applied to reduce or increase the balance the Brazilian government owed to us on the Petroleum and Alcohol Account. In 1999 and 2001, our actual sales price exceeded the formula price which was established by the Brazilian government. This



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excess was not accounted for as an increase in our revenues, but was instead accompanied by an equivalent reduction of our assets on our balance sheet under the line item Petroleum and Alcohol Account Receivable from the Brazilian government. The amount of the Petroleum and Alcohol Account receivable at December 31, 2002 was U.S.\$182 million, a substantial decrease from a high of U.S.\$7,414 million at December 31, 1996. As of January 2, 2002, we have been free to set our prices, subject to market conditions.

Our revenues are principally derived from sales in Brazil. The following table sets forth our domestic sales by volume of oil products, natural gas and fuel alcohol for the three years ended December 31, 2002, 2001 and 2000:

	For the Year Ended December 31,								
	2002			2001			2000		
	Volume	Net Average Price	Net Operating Revenues	Volume	Net Average Price	Net Operating Revenues	Volume	Net Average Price	Net Operating Revenues
(Mbbbl, except as otherwise noted)	(U.S.\$) <sup>(1)</sup>	(U.S.\$ in millions)	(Mbbbl, except as otherwise noted)	(U.S.\$) <sup>(1)</sup>	(U.S.\$ in millions)	(Mbbbl, except as otherwise noted)	(U.S.\$) <sup>(1)</sup>	(U.S.\$ in millions)	
Energy products:									
Automotive gasoline	97,642	\$26.94	\$ 2,630	98,061	\$35.99	\$ 3,529	106,456	\$42.10	\$ 4,482
Diesel	228,626	28.01	6,404	226,516	32.56	7,376	221,430	36.96	8,185
Fuel oil	48,069	20.12	967	55,250	19.55	1,080	63,630	21.48	1,367
Liquid petroleum gas	77,522	19.80	1,535	80,270	27.30	2,191	80,945	29.88	2,419
Total energy products	451,859		11,536	460,097		14,176	472,461		16,453
Non-energy products:									
Petrochemical									
naphtha	58,587	23.09	1,353	83,537	24.40	2,038	87,938	31.15	2,739
Others	90,686	24.82	2,251	88,774	27.12	2,408	77,151	30.04	2,318
Total non-energy products	149,273		3,604	172,311		4,446	165,089		5,057
Fuel alcohol	2,082	29.30	61	1,245	45.78	57	4,298	40.48	174
Natural gas (BOE)	56,876	12.92	735	48,748	13.89	677	37,938	13.86	526
Sub-total	660,090	24.14	15,936	682,401	28.36	19,356	679,786	32.67	22,210
Distribution net sales	170,609	38.35	6,543	169,936	40.32	6,851	164,294	40.47	6,649
Intercompany net sales	(158,041)	33.55	(5,302)	(158,667)	34.68	(5,503)	(150,802)	35.92	(5,417)
Sub-Total	672,658		17,177	693,670		20,704	693,278		23,442
Export net sales	209,504	22.72	4,760	127,829	21.61	2,763	88,661	28.81	2,555
International net sales	29,655	20.47	607	40,510	25.51	1,034	36,053	25.02	902
Services			68			48			56
Consolidated net sales	911,817		\$22,612	862,009		\$24,459	817,992		\$26,955

(1) Net average price calculated by dividing net sales price by the volume for the year.  
Export Sales Volumes and Prices

While our principal market is the Brazilian market, as our domestic production of crude oil has increased, we have begun to export greater amounts of crude oil and oil products that exceed Brazilian demand. We also export increased volumes of domestically produced heavy crude oil that our refineries are unable to process operationally or economically. See Item 4 Information on the Company Refining, Transportation and Marketing. As a result, our export volumes of crude oil and oil products have increased to 209,504 million barrels of crude oil equivalent in 2002, as compared to 127,829 million barrels of crude oil equivalent in 2001 and 88,661 million barrels of crude oil equivalent in 2000. We base our crude oil export prices on international prices, as adjusted to reflect specific market conditions. We determine export prices of our oil products and natural gas by reference to market conditions, as well as direct negotiations with our clients. As a result of our increased volume of exports, as well as to a lesser degree an increase in average prices for export sales of crude oil and oil products, the total value of our crude oil and oil product exports (measured on a free-on-board basis) in 2002 was U.S.\$4,760 million, as compared to U.S.\$2,763 million in 2001 and U.S.\$2,555 million in 2000. See Item 4 Information on the Company Refining, Transportation and Marketing Exports.

*International Volumes and Prices*

We produce, refine, transport, distribute and market crude oil and natural gas internationally. Sales from production outside Brazil to sources outside Brazil were U.S.\$607 million in 2002, U.S.\$1,034 million in 2001 and U.S.\$902 million in 2000. We expect our international sales to continue growing as our international production continues to grow and we increase our refining and distribution capacity abroad. See Item 4 Information on the Company International.

*Import Purchase Volumes and Prices*

Although we currently produce approximately 80% of our crude oil requirements in Brazil, we continue to import lighter crude oil for use in our own refineries, as well as smaller quantities of diesel, liquefied petroleum gas, naphtha and other oil products, which are sold in the Brazilian retail market. As we have produced more domestic crude oil capable of being processed in our Brazilian refineries and have upgraded our refineries to handle heavier crude oil, we have reduced our purchases of imported crude oil and oil products. This has positively affected the margin between our net operating revenues and cost of goods sold, since it is less expensive to produce crude oil domestically than it is to import crude oil. As we further upgrade our refineries to handle larger quantities of our heavy crude oil, we expect our level of imports to continue to decrease. We imported a total of 117.6 million barrels of crude oil in 2002, as compared to 128.8 million barrels of crude oil in 2001 and 106.0 million barrels of crude oil in 2000.

Prior to December 31, 2001, we were the only company permitted to import oil products to supply the Brazilian market's demand for these products. Now that other parties are permitted by law to supply the market, we continue to reevaluate our import strategy and may further reduce our level of imports to the extent profitable. We imported a total of 78.5 million barrels of oil products in 2002, as compared to 119.8 million barrels in 2001 and 140.1 million barrels in 2000. See Item 4 Information on the Company Refining, Transportation and Marketing Imports.

**Effect of Taxes on our Income**

*General*

In addition to collecting sales and value-added taxes, such as the *Imposto sobre Circulação de Mercadorias e Serviços*, or ICMS, on behalf of federal and state governments, we pay three principal taxes on our oil producing activities in Brazil:

Royalties, which generally correspond to a percentage between 5% and 10% of production, are calculated based on a reference price for crude oil or natural gas, and will thus vary with the international price of crude oil. The ANP also takes into account the geological risks involved, and productivity levels expected, with respect to a particular concession. Virtually all of our crude oil production is currently taxed at the maximum royalty rate.

Special Participation Tax, which applies to our larger, more profitable fields, and ranges from 0% to 40% depending on the volumes of crude oil produced in the fields, the location of the fields (including whether they are onshore or offshore), water depth and number of years that the field has been in production. In 2002, the tax was charged on seven of our fields, including Marlim, Albacora, Roncador, Leste do Urucu, Rio Urucu, Canto do Amaro and Marimbá. The tax is based on net revenues of a field, which consists of gross revenues less royalties paid, investments in exploration, operational costs and depreciation adjustments and applicable taxes.

Rental Tax, which is a tax payable on those concessions that are available for exploration and production, and is calculated at a rate established by the ANP, taking into consideration factors such as the location and size of the relevant concession block, the sedimentary basin and its geological characteristics.

These taxes imposed by the Brazilian government are included in our cost of goods sold, and therefore have a significant effect on our total lifting costs. Additionally, we are subject to tax on our income at an effective rate of 25% and a social contribution tax at an effective rate of 9%, the standard corporate tax rate in Brazil. See Note 3 to our audited consolidated financial statements.

#### *Proposed Change in ICMS Legislation*

The governor of the State of Rio de Janeiro is considering signing a bill into law that would increase the amount of ICMS that we are required to pay by approximately R\$5.4 billion (U.S.\$1.9 billion) per year. Currently, the ICMS is assessed at the refinery level at the point of sale of refined products, but not at the wellhead. As a result, the tax is mainly collected in the eight states where our refineries are located (Rio de Janeiro, São Paulo, Rio Grande do Sul, Paraná, Minas Gerais, Amazonas, Ceará and Bahia). If the new law becomes effective, it will 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. In that event, 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 income.

#### **Financial Income and Expense**

We derive financial income primarily from interest on cash and cash equivalents. The bulk of our cash equivalents are short term Brazilian government securities, including securities indexed to the U.S. dollar. We also hold substantial balances in U.S. dollar deposits.

Our financial income was U.S.\$1,142 million in 2002, U.S.\$1,375 million in 2001 and U.S.\$ 1,113 million in 2000. See *Results of Operations* Results of operations for the year ended December 31, 2002 ( 2002 ) compared to the year ended December 31, 2001 ( 2001 ) *Financial Income* and *Results of Operations* Results of operations for the year ended December 31, 2001 ( 2001 ) compared to the year ended December 31, 2000 ( 2000 ) *Financial Income*.

We incur financial expenses from short and long-term debt denominated in U.S. dollars, Reais and other currencies.

Our financial expenses were U.S.\$774 million in 2002, U.S.\$808 million in 2001 and U.S.\$909 million in 2000. In addition, we capitalized U.S.\$139 million in interest in 2002, as compared to U.S.\$123 million in 2001 and U.S.\$223 million in 2000. See *Results of Operations* Results of operations for the year ended December 31, 2002 ( 2002 ) compared to the year ended December 31, 2001 ( 2001 ) *Financial Expense* and *Results of Operations* Results of operations for the year ended December 31, 2001 ( 2001 ) compared to the year ended December 2000 ( 2000 ) *Financial Expense*.

#### **Inflation and Exchange Rate Variation**

##### *Inflation*

Since the introduction of the Real as the new Brazilian currency in July 1994, inflation in Brazil has remained relatively limited, although it has increased since the devaluation of the Real in January 1999. Inflation was 26.4% in 2002, 10.4% in 2001 and 9.9% in 2000, as measured by the IGP-DI, a general price index. Inflation has had, and may continue to have, effects on our financial condition and

results of operations. A large percentage of our total costs are in Reais, and our suppliers and service providers generally attempt to increase their prices to reflect Brazilian inflation. As expressed in U.S. dollars, however, these increases have been generally offset during the last four years by the effect of the appreciation of the U.S. dollar against the Real.

#### *Exchange Rate Variation*

Since we adopted the Real as our functional currency in 1998, the devaluation of the Real has had, and will continue to have, multiple effects on our results of operations. Our reporting currency for all periods is the U.S. dollar. We maintain our financial records in Reais, and translate our statements of operations into U.S. dollars at the average rate for the period. The amounts reported in our statements of operations in any given period will be reduced at the same rate as the Real has devalued in relation to the U.S. dollar during that period. During 2002, there was a 52.3% devaluation of the Real, as compared to an 18.7% devaluation in 2001 and a 9.3% devaluation in 2000.

Virtually all of our sales are of crude oil or oil products, which generally trade freely in the international markets at prices expressed in U.S. dollars. From July 1998 through the end of 2001, our net operating revenues reflected changes in the U.S. dollar/Real exchange rate, with a one month delay, because the formula used by the government to set realization prices for crude oil and oil products included adjustments based on exchange rate variations. See Item 4 Information on the Company Regulation of the Oil and Gas Industry in Brazil Price Regulation. Since January 2, 2002, when prices were deregulated, we have been free to establish prices for our products based on market conditions. As a result, although substantially all of our revenues are in Reais, they have been, and continue to be, linked to U.S. dollar-based international prices. When the Real depreciates against the U.S. dollar, assuming international prices remain constant in U.S. dollars, we may increase the prices for our products in Reais, in which case our net operating revenues in Reais increase. An increase in our Reais net operating revenue, however, is not reflected in our net operating revenue when reported in U.S. dollars. In periods of sharp devaluations or high international prices, however, we may not be able to adjust our prices in Reais sufficiently to maintain parity with international prices, and may therefore not realize the higher operating revenues in Reais that result from an increase in prices.

Another effect of devaluation is that our operating costs and expenses when expressed in U.S. dollars tend to decline. This happens primarily due to the fact that a substantial portion of our costs and operating expenses is denominated in Reais. During the last several years, our Reais-denominated costs have been increasing at a rate slower than the devaluation. Accordingly, the effect has been to decrease costs of locally supplied products and services when reported in U.S. dollars.

In recent periods, a devaluation of the Real has had the following additional effects, among others, on our financial condition and results of operations:

The remeasurement effects of our non-Reais denominated assets and liabilities held in Brazil (e.g. cash, cash equivalents and financial obligations) are recorded in our statements of income. Primarily because of our substantial liabilities denominated in foreign currency, we recorded a U.S.\$2,156 million net foreign exchange loss in our 2002 statement of income, compared to a U.S.\$976 million net foreign exchange loss in 2001 and a U.S.\$466 million net foreign exchange loss in 2000. To the extent these losses are not recognized in a transaction (such as the repayment of the debt in the period in which there is a devaluation), the foreign exchange loss is added back for purposes of determining our cash flow;

Our other assets and liabilities in Brazil, primarily accounts receivable, inventories and property, plant and equipment, cash and cash equivalents and government securities, pension plan liabilities, health care benefits and deferred income taxes, are all translated into U.S.

dollars. Therefore, any depreciation of the Real against the U.S. dollar will be reflected as a reduction in the U.S. dollar value of those assets and liabilities, charged directly to shareholders' equity. These currency translation effects are beyond our control. Accordingly, we recorded a U.S.\$5,452 million charge directly to shareholders' equity in our statement of changes in shareholders' equity for 2002, without affecting net income, to reflect the devaluation of the Real against the U.S. dollar of approximately 52.3%, as compared to a charge of U.S.\$2,695 million in 2001 to reflect the devaluation of 18.7% and a charge of U.S.\$1,179 million in 2000 to reflect the devaluation of 9.3%.

Foreign currency translation adjustments reflecting a devaluation have the greatest impact on the balance sheet of a company such as ours, whose assets are primarily denominated in Reals, but whose liabilities are primarily denominated in foreign currencies. The reductions in our asset values charged to shareholders' equity, however, do not necessarily affect our cash flows, since our revenues and cash earnings are to a large degree linked to the U.S. dollar, and a portion of our operating expenses are linked to the Real.

The devaluation of the Real also impacts the amount of retained earnings available for distribution by us when measured in U.S. dollars. Amounts reported as available for distribution in our statutory accounting records prepared in accordance with Brazilian accounting principles decrease or increase when measured in U.S. dollars as the Real depreciates or appreciates against the U.S. dollar. In addition, a devaluation of the Real creates foreign exchange gains and losses that are included in our results of operations determined in accordance with Brazilian accounting principles and that affect the amount our unappropriated earnings available for distribution.

### **Business Segments**

We participate in all aspects of the oil and gas business, from finding and extracting crude oil and natural gas from our reservoirs, refining crude oil and delivering the resulting oil products to the retail market. We have chosen to report our income related to the distribution and commercialization of our natural gas separately from crude oil, because of the growing importance of natural gas to our results. Due to the limited nature of our petrochemical operations, we include these results within our supply segment, rather than in a separate segment. We conduct approximately 96% of our oil and gas production in Brazil, and the remainder internationally, primarily in the rest of South America, West Africa and the Gulf of Mexico.

We report our results by market segment to reflect our organizational structure as follows:

**Exploration and Development** This segment includes our crude oil exploration, development, production and marketing activities in Brazil. See Item 4 Information on the Company Exploration, Development and Production.

**Supply** This segment includes our refining, logistic, transportation and commercialization activities for oil products and fuel alcohol in Brazil. Additionally, this segment includes our investments in various domestic petrochemical companies and our domestic fertilizer plants. See Item 4 Information on the Company Refining, Transportation and Marketing.

**Distribution** This segment represents our oil product and fuel alcohol distribution activities in Brazil, mainly conducted by BR. See Item 4 Information on the Company Distribution.

**Gas and Energy** This segment encompasses the commercialization and transportation of natural gas produced in or imported into Brazil. Additionally, this segment includes our

investments in, and commercialization of, electric energy and optic fiber in Brazil, as well as in domestic natural gas transportation companies, state-owned natural gas distributors and thermoelectric companies. See Item 4 Information on the Company Natural Gas and Power.

**International** This segment represents our international activities, which include exploration and production, transportation, refining, distribution and natural gas and power. This segment also began to include our international distribution activities upon completion of the business combination with Repsol-YPF in December 2001. See Item 4 Information on the Company International.

The segment information included in this annual report was prepared based on the same accounting policies reflected in our audited consolidated financial statements. Intersegment net revenues related to transfers of crude oil were recorded at estimated market prices based upon our internal model which considers a netback pricing methodology primarily based upon monthly prices for Brent crude, giving effect to product quality and transportation considerations as well as taxes paid. Until January 2002, intersegment sales and transfers related to oil products were recorded at the realization prices established by the Brazilian government for purposes of calculating our net operating revenues. Since January 2, 2002, when prices were deregulated, we have been free to record intersegment sales and transfers related to oil products based on prevailing market prices.

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The following table sets forth by segment selected financial data reflecting our domestic and international activities for the three years ended December 31, 2002, 2001 and 2000:

**SELECTED FINANCIAL DATA BY SEGMENT<sup>(1)</sup>**

	For the Year Ended December 31, <sup>(1)</sup>		
	2002	2001	2000
(In millions of U.S. dollars)			
<b>Exploration, Development and Production (Exploration and Development Segment)</b>			
Net revenues to third parties <sup>(3)</sup>	\$ 2,346	\$ 308	\$ 891
Intersegment net revenues	10,700	9,796	11,248
	<u>13,046</u>	<u>10,104</u>	<u>12,139</u>
Total net operating revenues	13,046	10,104	12,139
Depreciation, depletion and amortization	(1,378)	(1,228)	(1,256)
Net income (loss)	3,413	2,439	3,928
Capital expenditures	3,156	2,866	2,581
Property, plant and equipment, net	11,611	12,133	11,549
<b>Refining, Transportation and Marketing (Supply Segment)</b>			
Net revenues to third parties <sup>(3)</sup>	\$ 12,073	\$ 15,969	\$ 18,620
Intersegment net revenues	5,269	5,757	5,605
	<u>17,342</u>	<u>21,726</u>	<u>24,225</u>
Total net operating revenues	17,342	21,726	24,225
Depreciation, depletion and amortization	(358)	(301)	(519)
Net income (loss)	711	2,538	1,943
Capital expenditures	945	642	569
Property, plant and equipment, net	3,186	4,026	4,661
<b>Distribution (Distribution Segment)</b>			
Net revenues to third parties <sup>(3)</sup>	\$ 6,460	\$ 6,836	\$ 6,650
Intersegment net revenues	102	100	98
	<u>6,562</u>	<u>6,936</u>	<u>6,748</u>
Total net operating revenues	6,562	6,936	6,748
Depreciation, depletion and amortization	(24)	(28)	(31)
Net income (loss)	91	78	139
Capital expenditures	139	86	68
Property, plant and equipment, net	296	309	299
<b>Natural Gas and Power (Gas and Energy Segment)<sup>(2)</sup></b>			
Net revenues to third parties <sup>(4)</sup>	\$ 747	\$ 659	\$
Intersegment net revenues	170	177	
	<u>917</u>	<u>836</u>	<u>50</u>
Total net operating revenues	917	836	50
Depreciation, depletion and amortization	(45)	(62)	
Net income (loss)	(190)	(54)	
Capital expenditures	268	192	50
Property, plant and equipment, net	1,881	1,373	1,564
<b>International (International Segment)<sup>(4)</sup></b>			
Net revenues to third parties <sup>(3)</sup>	\$ 986	\$ 777	\$ 794
Intersegment net revenues	99	71	
	<u>1,085</u>	<u>848</u>	<u>794</u>
Total net operating revenues	1,085	848	794
Depreciation, depletion and amortization	(106)	(101)	(141)
Net income (loss)	(114)	24	93
Capital expenditures	241	326	245
Property, plant and equipment, net	1,024	1,080	924



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- (1) As explained above and in Note 21 to our audited consolidated financial statements, beginning on January 1, 2001, we began to record operating results under a business segment structure different from that used before that date. We have reclassified net operating revenues by segment for the year ending December 31, 2000 in accordance with the revised business segment structure. In addition, some non-revenue information is also recorded in a sixth corporate segment which is not included in the table.
  - (2) Revenue and net income information for the gas and energy segment are combined with the revenue and net income information of the exploration and production and supply segments for all periods prior to the fiscal year 2001 because the changes in our systems required to accommodate our new segment reporting do not permit the practicable separation of revenue and cost information for these segments. We do not believe this classification of the gas and energy revenue and net income information materially changes our overall segment presentation.

- (3) As a vertically integrated company, not all of our segments have significant third-party revenues. For example, our exploration and production segment accounts for a large part of our economic activity and capital expenditures, but has little third party revenues.
- (4) In periods prior to January 1, 2002, revenue and net income from the gas and energy activities of the international segment were added to revenue and net income from the exploration and production activities of the international segment, as our management did not separate our gas and energy operations abroad. In addition, the changes in our accounting systems adopted in connection with our new business segment reporting does not permit the practicable separation of revenue and cost information for those prior periods. We do not believe this classification of the gas and energy revenue and net income information materially changes the overall segment presentation provided in this annual report.

### Results of Operations

The differences in our operating results from year to year occur as a result of a combination of factors, including primarily: the volume of crude oil, oil products and natural gas we produce and sell, the price at which we sell our crude oil and oil products, and the differential between the Brazilian inflation rate and the depreciation or appreciation of the Real against the U.S. dollar. The table below shows the amount by which each of these variables has changed during the last three years:

	<u>2002</u>	<u>2001</u>	<u>2000</u>
Crude Oil and NGL Production (Mbpd)			
Brazil	1,500	1,336	1,271
International	35	43	53
Total Crude Oil and NGL Production	1,535	1,379	1,324
Change in Crude Oil and NGL Production	11.3%	4.2%	11.2%
Average Sales Price for Crude (bpd in U.S.\$)			
Brazil	\$22.30	\$19.89	\$26.07
International	23.00	\$22.32	\$26.37
Natural Gas Production (Mmcfd)			
Brazil	1,512	1,392	1,326
International	138	150	126
Total Natural Gas Production	1,650	1,542	1,452
Change in Natural Gas Production (sold only)	7.0%	6.2%	16.9%
Average Sales Price for Natural Gas (Mcf in U.S.\$)			
Brazil	1.22	1.39	1.49
International	1.34	2.35	2.29
Year End Exchange Rate	3.53	2.32	1.96
Devaluation during the year	52.3%	18.7%	9.3%
Inflation Rate (IGP-DI)	26.4%	10.4%	9.9%

*Results of Operations for the year ended December 31, 2002 ( 2002 ) compared to the year ended December 31, 2001 ( 2001 ).*

The comparison between our results of operations has been significantly impacted by the Real's devaluation against the U.S. dollar, due to the fact that the average exchange rate for 2002 was 24.2% higher than the average exchange rate for 2001.

### Revenues

Net operating revenues decreased 7.9% to U.S.\$22,612 million for 2002, as compared to net operating revenues of U.S.\$24,549 million for 2001. This decrease is primarily attributable to the 52.3% devaluation of the Real against the U.S. dollar in 2002, as we were unable to increase prices for oil products in the domestic market sufficiently to offset the effect of the devaluation. To a lesser extent, this

decrease was a result of a 3.0% decrease in the domestic sales volumes. This decrease in net operating revenues was partially offset by an increase of 42.1% in sales volumes outside Brazil during 2002.

Our consolidated sales of products and services decreased 3.4% to U.S.\$32,987 million for 2002, as compared to U.S.\$34,145 million for 2001.

Included in sales of products and services are the following amounts which we collected on behalf of the federal or state governments:

Value-added and other taxes on sales of products and services and social security contributions. These taxes decreased to U.S.\$5,241 million for 2002, as compared to U.S.\$8,627 million for 2001, primarily due to the decrease in sales of products and services and to the reduction in value-added taxes collected on behalf of the state government from distributors (PASEP/COFINS) during 2002, since the amounts paid as CIDE are permitted to be deducted from the amount over which the PASEP and COFINS are calculated;

CIDE, the newly instituted per-transaction tax due to the Federal Government, which amounted to U.S.\$5,134 million for 2002; and

PPE, which represented the Specific Parcel Price or difference between the mandated price for an oil product by the government and the realization price allowed by the government, and which amounted to an expense of U.S.\$969 million for 2001 and which was eliminated at the end of 2001, and therefore did not affect our results in 2002.

#### Cost of sales

Cost of sales for 2002 decreased 10.2% to U.S.\$11,506 million, as compared to U.S.\$12,807 million for 2001. This decrease was principally a result of:

a decrease in imports primarily of crude oil and oil products principally as a result of the elimination of our legal obligation to import naphtha, which resulted in a decrease to cost of sales of approximately U.S.\$1,078 million;

the effect of the devaluation of the Real against the U.S. dollar on our cost of sales as expressed in U.S. dollars, which resulted in a decrease to cost of sales of approximately U.S.\$604 million (since approximately 37.1% of our cost of sales is denominated in Reais); and

a decrease of approximately U.S.\$297 million related to the 3% reduction in domestic sales volumes.

These decreases were partially offset by:

a net increase in cost of sales outside Brazil of approximately U.S.\$635 million, attributable to an increase in our sales volume outside Brazil, which includes both international sales and exports; and

an increase in taxes and charges imposed by the Brazilian government, which amounted to U.S.\$2,014 million for 2002, as compared to U.S.\$1,809 million for 2001. These taxes and charges increased by approximately U.S.\$205 million and included the special participation tax payable (an extraordinary charge payable in the event of high production and/or profitability from our fields), which increased to U.S.\$917 million for 2002, as compared to

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U.S.\$753 million for 2001. This increase in the special participation tax payable was attributable primarily to an increase in production of crude oil and oil products and increases in the applicable tax rates.

### Depreciation, depletion and amortization

Depreciation, depletion and amortization relating to exploration and production assets are calculated on the basis of the units of production method. Depreciation, depletion and amortization expenses increased 11.6% to U.S.\$1,930 million for 2002, as compared to U.S.\$1,729 million for 2001. This increase was primarily attributable to a 12% increase in production of crude oil, NGL and natural gas, primarily in the Campos Basin, and an increase in abandonment costs as a result of increased production and a revision in our estimates of abandonment costs. These increases were partially offset by the effect of the devaluation of the Real against the U.S. dollar in 2002.

### Exploration, including exploratory dry holes

Exploration costs, including costs related to exploratory dry holes increased 7.7% to U.S.\$435 million for 2002, as compared to U.S.\$404 million for 2001.

This increase was primarily attributable to an increase of approximately U.S.\$38 million in dry holes expenses and U.S.\$58 million in geological and geophysical expenses, and was partially offset by the effect of the devaluation of the Real against the U.S. dollar.

### Impairment of oil and gas properties

For 2002, we recorded an impairment charge of U.S.\$75 million, as compared to an impairment charge of U.S.\$145 million for 2001. In 2002, the impairment charge was related to certain of our producing oil and gas properties in Brazil and Angola. In 2001, the impairment charge was related to certain of our producing oil and gas properties in Brazil, Colombia and the United States. These charges were recorded based upon our annual assessment of our fields using prices consistent with those used in our overall Strategic Plan and discounted at a rate of 10%.

### Selling, general and administrative expenses

Selling, general and administrative expenses decreased 0.6% to U.S.\$1,741 million for 2002, as compared to U.S.\$1,751 million for 2001.

Selling expenses increased 0.5% to U.S.\$966 million for 2002, as compared to U.S.\$961 million for 2001. Although largely offset by the effect of the devaluation of the Real on these expenses when expressed in U.S. dollars, this increase was primarily attributable to the following:

- a U.S.\$74 million charge for doubtful accounts and gas station improvements;

- U.S.\$11 million in expenses in 2002 of Eg3, our oil product marketing subsidiary operating in Argentina; and

- an increase of U.S.\$76 million in expenses related to technical consulting services in connection with our increased outsourcing of selected non-core activities.

General and administrative expenses decreased 1.9% to U.S.\$775 million for 2002, as compared to U.S.\$790 million for 2001. This decrease was primarily attributable to the effect of the 52.3% devaluation of the Real against the U.S. dollar, and was partially offset by an increase of U.S.\$62 million

in expenses related to technical consulting services in connection with our increased outsourcing of selected non-core general and administrative activities.

#### Research and development expenses

Research and development expenses increased 11.4% to U.S.\$147 million for 2002, as compared to U.S.\$132 million for 2001. This increase was primarily related to our additional investments in programs for environmental safety and deepwater and refining technologies of approximately U.S.\$41 million, and was partially offset by the effect of the devaluation of the Real against the U.S. dollar.

#### Equity in results of non-consolidated companies

Equity in results of non-consolidated companies decreased to a loss of U.S.\$178 million for 2002, as compared to a loss of U.S.\$8 million for 2001. This decrease was mainly attributable to:

- a loss of U.S.\$95 million in 2002 related to the effect of the devaluation of the Argentine Peso against the U.S. dollar, as compared to a loss of U.S.\$44 million in 2001, which devaluation negatively impacted the result of our equity investments in Compañía Mega, an Argentine company which is engaged in natural gas activities;

- a loss of U.S.\$94 million in 2002, related to our investments in thermoelectric power plants; and

- a decrease of U.S.\$17 million in income from our investments in petrochemical companies in 2002, as compared to 2001.

#### Financial income

We derive financial income from several sources, including interest on cash and cash equivalents, long-term Brazilian government securities and government receivables, primarily the Petroleum and Alcohol Account.

Financial income decreased 16.9% to U.S.\$1,142 million for 2002, as compared to U.S.\$1,375 million for 2001. This decrease was primarily attributable to:

- a reduction in financial interest income from short-term investments, which declined 10.5% to U.S.\$793 million for 2002, as compared to U.S.\$886 million for 2001, primarily due to the fact that the average exchange rate for 2002 was 24.2% higher than the average exchange rate for 2001 and the reduction in our cash position as a result of the acquisitions of Perez Companac, Petrolera Perez Companac and Petrolera Santa Fe; and

- a reduction in financial interest income from Brazilian government securities (National Treasury Bonds), which were transferred last year to PETROS, our pension plan for employees, to reduce our pension liability, which decreased 83.5% to U.S.\$40 million for 2002, as compared to U.S.\$243 million for 2001.

#### Financial expense

Financial expense decreased 4.2% to U.S.\$774 million for 2002, as compared to U.S.\$808 million for 2001. This decrease was primarily attributable to a reduction in LIBOR and our replacing of current maturities of long-term debt with newly contracted long-term obligations at lower interest rates.

Monetary and exchange variation on monetary assets and liabilities, net

Monetary and exchange variation on monetary assets and liabilities, net increased 126% to an expense of U.S.\$2,068 million for 2002, as compared to an expense of U.S.\$915 million for 2001. Approximately 87% of our indebtedness was denominated in foreign currencies during each of 2002 and 2001. The expense increase is therefore primarily related to the effect of the 52.3% devaluation of the Real against the U.S. dollar during 2002 as compared to a 18.7% devaluation of the Real against the U.S. dollar during 2001.

Employee benefits expense

Employee benefits expense consists of financial costs relating to pension and other post-retirement benefits. Employee benefits expense decreased 24.1% to U.S.\$451 million for 2002, as compared to U.S.\$594 million for 2001.

This decrease was primarily attributable to a decrease in the provision of U.S.\$78 million due to the annual actuarial calculation of the pension plan liability and by the effect of the devaluation of the Real against the U.S. dollar.

The decreases were partially offset by an expense of U.S.\$34 million related to the migration process to our new pension plan and administrative fees in the amount of U.S.\$16 million charged by PETROS in respect of the transfer of Series B Bonds to PETROS.

Other taxes

Other taxes, consisting of miscellaneous value-added, transaction and sales taxes, increased 22% to U.S.\$360 million for 2002, as compared to U.S.\$295 million for 2001. This increase is primarily attributable to an increase of U.S.\$79 million in the PASEP/COFINS taxes payable in respect of foreign exchange gains on assets, resulting from transactions with affiliates with assets denominated in foreign currencies, and was partially offset by the effect of the 18.7% devaluation of the Real against the U.S. dollar.

Other expenses, net

Other expenses, net are primarily comprised of gains and losses recorded on sales of fixed assets, general advertising and marketing expenses and certain other non-recurring charges. Other expenses, net for 2002 increased 92.6% to U.S.\$857 million, as compared to an expense of U.S.\$445 million for 2001. The most significant non-recurring charges for 2002 were:

- a U.S.\$258 million charge for non-reimbursable contractual contingency payments incurred during the year related to our investments in thermoelectric power plants resulting from decreased demand and lower prices for energy;

- a U.S.\$201 million provision for losses related to our commitments to supply natural gas for the production of energy to certain thermoelectric power plants (despite decreased demand and low energy prices, we have contractual obligations with certain power plants to cover losses when demand for power and electricity prices decrease);

- a U.S.\$105 million provision for notifications of tax assessments received from the INSS, as further described in Item 8 Financial Information-Legal Proceedings.

- a U.S.\$111 million expense for unscheduled stoppages of plant and equipment; and

a U.S.\$96 million expense for general advertising and marketing expense unrelated to direct revenues;

a U.S.\$29 million expense for Petroleum and Alcohol Account regularization.

The most significant non-recurring charges for 2001 were:

a U.S.\$405 million expense relating to the reduction in the balance of the Petroleum and Alcohol Account resulting from the completion of the certification of the balance of the account by the Federal Government for the period from April 1, 1992 to June 30, 1998;

a U.S.\$394 million provision for losses on uncollectable accounts in connection with the construction/conversion of platforms P-36, P-37, P-38 and P-40;

a U.S.\$155 million loss, net of insurance proceeds, recorded in respect of the sinking of Platform P-36; and

a U.S.\$137 million expense for general advertising and marketing expenses unrelated to direct revenues.

The losses for the year ending December 31, 2001 were partially offset by:

a U.S.\$89 million gain related to the sale of Petrobras U.K.; and

a U.S.\$500 million gain related to the assets which we sold in our business combination with Repsol-YPF.

Income tax (expense) benefit

Income before income taxes and minority interest decreased 32.6% to U.S.\$3,232 million for 2002, as compared to U.S.\$4,792 million for 2001. As a result, we recorded an income tax expense of U.S.\$1,153 million for 2002, a 17.0% decrease from an expense of U.S.\$1,389 million recorded for 2001. The most significant factors that influenced this decrease were:

a U.S.\$111 million gain recorded in 2001 related to the reversal of a tax provision established in previous years in connection with the privatization of our Petroquisa subsidiary; and

a U.S.\$204 million valuation allowance as of December 31, 2002, as compared to a valuation allowance of U.S.\$38 million as of December 31, 2001.

The reconciliation between the tax calculated based upon statutory tax rates to income tax expense and effective rates is shown in Note 3 to our audited consolidated financial statements as of December 31, 2002.

*Results of operations for the year ended December 31, 2001( 2001 ) compared to the year ended December 31, 2000 ( 2000 )*

#### Revenues

Net operating revenues decreased 8.9% to U.S.\$24,549 million for 2001, as compared to net operating revenues of U.S.\$26,955 million for 2000. This decrease is primarily attributable to a decrease in international oil product prices from December 31, 2000 through December 31, 2001, which is

reflected in the realization price we were allowed to charge for oil products. This decrease was partially offset by the increase in the volume of sales outside Brazil, which includes both international sales and exports.

Our consolidated sales of products and services decreased 3.8% to U.S.\$34,145 million for 2001, as compared to U.S.\$35,496 million for 2000. This decrease is primarily attributable to the effect of the 18.7% devaluation of the Real on our sales of products and services as expressed in U.S. dollars, which to a large degree was offset by increases granted by the Brazilian government in the prices we were allowed to charge for our basic oil products in Brazil during 2001, including aggregate increases of 9.1% in the price of gasoline, 8.6% in the price of diesel, 10.4% in the price of aviation fuel and 4.8% in the price of fuel oil. The net result of both of these effects was a net decrease of approximately U.S.\$1,618 million in sales of products and services within Brazil, because the price increases granted were less than the effect of the devaluation, as a result of the decline in international prices for oil products. Slightly lower domestic sales of crude oil and oil products also contributed to the decrease.

This decrease was partially offset by an increase in revenues from sales outside Brazil of approximately U.S.\$267 million, primarily attributable to an increase in our sales volume in the international market, which was offset in part by a decrease in international sales prices for oil products.

Included in sales of products and services are the following amounts which we collected on behalf of the federal or state governments:

Value-added and other taxes on sales of products and services, and social security contributions. These taxes decreased to U.S.\$8,627 million for 2001, as compared to U.S.\$8,829 million for 2000. This decrease was primarily due to the decrease in sales of products and services as expressed in U.S. dollars, although partially offset by an increase in the applicable COFINS and PASEP rates. Until June 30, 2000, the applicable PASEP and COFINS rates were 0.65% and 3%. Since July 1, 2000, however, these rates have been differentiated by product, and range from 1.46% to 2.70% in the case of PASEP and 6.74% to 12.45% in the case of COFINS.

PPE, which amounted to a positive U.S.\$969 million for 2001, as compared to a negative U.S.\$288 million 2000. During 2001, our sales of products and services (net of value-added and other taxes) exceeded our net operating revenues due to decreases in prevailing international prices for oil products and increases granted by the Brazilian government in the prices we were allowed to charge for our basic oil products and services in Brazil during 2001. This resulted in a corresponding decrease in the balance of the Petroleum and Alcohol Account. Conversely, PPE was negative during 2000, because increases in prevailing international prices for oil products were not fully reflected in the sales prices we were allowed to charge for our oil products in Brazil, resulting in a corresponding increase in the balance of the Petroleum and Alcohol Account.

#### Cost of sales

Cost of sales for 2001 decreased 4.8% to U.S.\$12,807 million, as compared to U.S.\$13,449 million for 2000. The principal items that contributed to the decrease in our cost of sales were:

a decrease in imports resulting in a decrease to cost of sales of approximately U.S.\$938 million; and



to a lesser extent, the effect of the 18.7% devaluation of the Real on our cost of sales as expressed in U.S. dollars, since a significant portion of our cost of sales is denominated in Reais.

These decreases were partially offset by:

a 4.2% increase in our volume of sales, most of which was due to an increase in oil products sold outside Brazil, that resulted in an increase of approximately U.S.\$545 million in our cost of sales;

a U.S.\$120 million increase in taxes and charges imposed by the Brazilian government, which amounted to U.S.\$1,809 million for 2001, as compared to U.S.\$1,689 million for 2000. These taxes and charges included the following:

- The special participation tax payable, which increased to U.S.\$753 million for 2001, as compared to U.S.\$624 million for 2000, attributable primarily to an increase in production in our most productive fields.
- The royalty tax payable, which decreased to U.S.\$1,023 million for 2001, as compared to U.S.\$1,030 million for 2000, attributable primarily to a decrease in market prices of crude oil and oil products, but partially offset by an increase in the production volume of crude oil and oil products during the same period.

an increase of approximately U.S.\$227 million in crude oil transportation costs, due primarily to increases in prevailing international freight charges.

#### Depreciation, depletion and amortization

Depreciation, depletion and amortization expenses decreased 14.5% to U.S.\$1,729 million for 2001, as compared to U.S.\$2,022 million for 2000. The 18.7% devaluation of the Real was primarily responsible for the decrease in our depreciation, depletion and amortization expenses. These decreases were partially offset by the increase of approximately U.S.\$193 million related to depreciation expenses on projects under development that were not active during all of fiscal year 2000.

#### Exploration, including exploratory dry holes

Costs for exploration, including exploratory dry holes decreased 8.2% to U.S.\$404 million for 2001, as compared to U.S.\$440 million for 2000. This decrease was primarily attributable to the effect of the 18.7% devaluation of the Real on costs for exploration when expressed in U.S. dollars and a decrease of approximately U.S.\$24 million in dry holes expenses. These decreases were partially offset by the increase of approximately U.S.\$76 million related to geological and geophysical expenses.

#### Impairment of oil and gas properties

For 2001, we recorded an increase in impairment charges of U.S.\$145 million, as compared to U.S.\$37 million for 2000. In 2001, we recorded an impairment charge with respect to some of our producing oil and gas properties in Brazil, Colombia and the United States. In 2000, the impairment charge was related to some of our producing properties in Brazil and Colombia. These charges were recorded based upon our annual assessment of the fields using prices consistent with those used in our overall Strategic Plan, discounted at a rate of 10%. See Note 8 to our audited consolidated financial statements.

Selling, general and administrative expenses

Selling, general and administrative expenses increased 20.8% to U.S.\$1,751 million for 2001, as compared to U.S.\$1,450 million for 2000.

Selling expenses increased 19.4% to U.S.\$961 million for 2001, as compared to U.S.\$805 million for 2000. Although partially offset by the effect of the 18.7% devaluation of the Real on these expenses when expressed in U.S. dollars, this increase was primarily attributable to the following:

an increase in transportation costs for oil products from U.S.\$352 million for 2000 to U.S.\$523 million for 2001, resulting primarily from increases in prevailing international freight charges;

a U.S.\$44 million charge for doubtful accounts and gas station improvements recognized by BR in 2001. These expenses were previously classified as other expenses, net in 2000; and

an increase of approximately U.S.\$43 million in salary and payroll expenses and expenses related to technical consulting services.

General and administrative expenses increased 22.5% to U.S.\$790 million for 2001, as compared to U.S.\$645 million for 2000. Although partially offset by the effect of the 18.7% devaluation of the Real on these expenses when expressed in U.S. dollars, this increase was primarily attributable to the following:

an increase in salary and payroll liabilities for administrative employees, including expenses relating to the pension fund and for employee profit sharing accrual for active administrative personnel, in the amount of approximately U.S.\$101 million; and

an increase of approximately U.S.\$120 million in expenses related to technical consulting services in connection with our increased outsourcing of selected non-core activities relating to general and administrative activities.

Research and development expenses

Research and development expenses decreased 13.2% to U.S.\$132 million for 2001, as compared to U.S.\$152 million for 2000. This decrease was primarily attributable to the effect of the 18.7% devaluation of the Real on these expenses when expressed in U.S. dollars, although partially offset by increased investments in programs for environmental safety and deepwater and refining technologies.

Financial income

Financial income increased 23.5% to U.S.\$1,375 million for 2001, as compared to U.S.\$1,113 million for 2000. The increase is primarily attributable to an increase in interest income from cash and cash equivalents, which amounted to U.S.\$886 million for 2001, as compared to U.S.\$607 million for 2000, primarily as a result of the increase in our average balance of cash and cash equivalents from U.S.\$4,421 million for 2000 to U.S.\$6,593 million for 2001. U.S.\$243 million of our financial income is derived from our holding of NTN-P government securities which accrued all interest-in-kind.

Financial expense

Financial expense decreased 11.1% to U.S.\$808 million for 2001, as compared to U.S.\$909 million for 2000. This decrease was primarily attributable to a decrease in the LIBOR and U.S. Treasury

rates, a reduction in the spread that we paid on the indebtedness that we incurred in 2001 and our replacement of maturing indebtedness with newly contracted indebtedness at lower rates. These lower rates were partially offset by a higher indebtedness balance on average of approximately U.S.\$12,348 million. In addition, we capitalized U.S.\$123 million in interest in 2001, compared to U.S.\$223 million in interest in 2000.

#### Monetary and exchange variation on monetary assets and liabilities, net

Monetary and exchange variation on assets and liabilities denominated in currencies other than Reais increased 59.1% to an expense of U.S.\$915 million for 2001, as compared to an expense of U.S.\$575 million for 2000. Approximately 87% of our indebtedness was denominated in currencies other than the Real during each of 2001 and 2000. The increase is primarily attributable to the effect of the 18.7% devaluation of the Real against the U.S. dollar during 2001, as compared to a 9.3% devaluation of the Real against the U.S. dollar during 2000.

Additionally, we realized a loss of U.S.\$77 million in respect of our hedge contracts, due to the devaluation of the Japanese Yen against the U.S. dollar during 2001.

#### Employee benefits expense

Employee benefits expenses consist of financial costs relating to pension and other post-retirement benefits. Employee benefits expenses increased 60.5% to U.S.\$594 million for 2001, as compared to U.S.\$370 million for 2000. The increase is primarily attributable to an administrative fee of 6% charged by PETROS in respect of the transfer of Series B Bonds by us to PETROS, amounting to an expense of U.S.\$128 million, and an expense of U.S.\$38 million related to the migration process to our new pension plan.

#### Other taxes

Other taxes, consisting of miscellaneous value-added, transaction and sales taxes, increased 20.4% to U.S.\$295 million for 2001, as compared to U.S.\$245 million for 2000. This increase was due primarily to increases in value-added taxes payable with respect to interest income from short-term investments, and an increase in the CPMF payable on financial transactions during 2001. This was partially offset by the effect of the 18.7% devaluation of the Real against the U.S. dollar during 2001.

#### Loss on government securities

Loss on government securities was previously reported as a component of other expenses, net. Loss on government securities increased to U.S.\$1,099 million for 2001, as compared to U.S.\$192 million for 2000. In 2001, we exchanged our NTN-P bonds for NTN-B bonds. The NTN-P bonds could not be traded on the secondary market, nor had we intended to sell them, so we recorded them at face value. When we exchanged the NTN-P notes for the NTN-B bonds, we were required to mark them to the lower of cost or market value, and in marking them to market value, we recognized a loss. Subsequently, these NTN-B bonds were transferred to our pension plan, PETROS, in order to decrease our liability to PETROS. In 2000, our loss on government securities was attributable to marking to market SIBR and ELET government securities, which we transferred to PETROS in 2000.

#### Other expenses, net

Other expenses, net for 2001 decreased 1.1% to U.S.\$445 million, as compared to U.S.\$450 million for 2000. Other expenses, net are primarily comprised of gains and losses recorded on sales of

fixed assets, certain other non-recurring charges and general advertising and marketing expenses. The most significant nonrecurring charges for 2001 were:

a U.S.\$405 million expense relating to the reduction in the balance of the Petroleum and Alcohol Account resulting from the completion of the certification of the balance of the account by the Brazilian government for the period from April 1, 1992 to June 30, 1998;

a U.S.\$155 million loss, net of insurance proceeds, recorded due to the sinking of Platform P-36;

a U.S.\$394 million provision for losses on uncollectable accounts in connection with the construction/conversion of certain platforms; and

a U.S.\$137 million general advertising and marketing expense.

These losses were partially offset by:

a gain of U.S.\$89 million related to the sale of Petrobras U.K. Ltd. in 2001; and

a gain of U.S.\$500 million related to the assets which we sold in our business combination with Repsol-YPF.

The most significant non-recurring charges for 2000 were:

a U.S.\$124 million general advertising and marketing expense;

a U.S.\$105 million expense relating to the reduction in the balance of the Petroleum and Alcohol Account resulting from the partial completion of the certification of the balance of such account by the Brazilian government;

a U.S.\$92 million expense, primarily relating to costs incurred in connection with oil spills in Guanabara Bay and the State of Paraná; and

a U.S.\$41 million charge for doubtful accounts recognized by BR in 2000. These expenses were classified as selling expenses in 2001.

These expenses were partially offset by the U.S.\$133 million received during 2000 as consideration under contracts we entered into with leading oil and gas companies for exploration, development and production ventures. Under the terms of these contracts, we sold a partial interest in each of these fields and recorded the proceeds received as a gain, since we had no carrying costs on them.

## Income tax (expense) benefit

Income tax expense decreased 45.0% to U.S.\$1,389 million for 2001, as compared to an expense of U.S.\$2,523 million for 2000. This difference is primarily attributable to a decrease in income before income taxes and minority interest from U.S.\$7,803 million during 2000 to U.S.\$4,792 million during 2001. See Note 3 to our audited consolidated financial statements.

**Liquidity and Capital Resources***Capital expenditures*

Total consolidated capital expenditures were U.S.\$4,911 million in 2002, U.S.\$4,254 million in 2001 and U.S.\$3,583 million in 2000, reflecting increases of 15.4% in 2002 as compared to 2001 and of 18.7% in 2001 as compared to 2000. This increase in capital expenditures in 2002 was primarily a result of increased expenditures on our exploration and production activities and improvements in our refinery facilities. Of the capital expenditures incurred during 2002, U.S.\$3,156 million (64%) were directed to domestic exploration and production activities, which includes our exploration and production segment, our project financings and our investments in thermoelectric power plants.

The following table sets forth our consolidated capital expenditures (including project financings and investment in thermoelectric power plants) for each of our business segments for 2002, 2001 and 2000:

	<b>For the Year Ended December 31,</b>		
	<b>2002</b>	<b>2001</b>	<b>2000</b>
	(in millions of U.S. dollars)		
Exploration and Production	\$3,156	\$2,866	\$2,581
Supply	945	642	569
Distribution	139	86	68
Gas and Energy	268	192	50
International	241	326	245
Corporate	162	142	70
<b>Total</b>	<b>\$4,911</b>	<b>\$4,254</b>	<b>\$3,583</b>

Our capital expenditures in 2002, 2001 and 2000 were primarily directed towards increasing our production capabilities in the Campos Basin, modernizing our refineries, expanding our pipeline transportation and distribution systems and to a lesser extent, investing in energy and gas related activities, such as investments in natural and thermoelectric power plants.

In 2002, we spent U.S.\$1,167 million on acquisitions. Some of the companies we have acquired may require additional financing for capital expenditures or for debt reduction. See Item 4. Information on the Company International Argentine Activities.

On April 17, 2003, we announced the adoption of revisions to our Strategic Plan for the period from 2003 through 2007. The new Strategic Plan maintains our main 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.

Our capital expenditures budget for the year 2003, including our project financings, is U.S.\$7.2 billion, allocated among each of our business segments as follows: (i) Exploration and Production:

U.S.\$3.8 billion; (ii) Supply: U.S.\$1.4 billion; (iii) International: U.S.\$0.8 billion; (iv) Gas and Energy: U.S.\$0.8 billion; (v) Distribution: U.S.\$0.3 billion; and (vi) Corporate: U.S.\$0.1 billion.

Our Strategic Plan contemplates total budgeted capital expenditures of U.S.\$34.3 billion in the period from 2003 through 2007, approximately U.S.\$29.2 billion of which will be directed towards our activities in Brazil, while U.S.\$5.1 billion will be directed to our activities abroad. We expect that the majority of our capital expenditures from 2003 through 2007, approximately U.S.\$22.4 billion, will be directed towards our Exploration and Production business segment. Our average budgeted capital expenditures for the years 2003-2007 are consistent with net cash provided by operating activities during the last four years and with our future expected cash flows. We plan to meet our budgeted capital expenditures primarily through internally generated cash, while replacing maturing debt during this period with newly contracted financing and capital increases, if necessary.

#### *Financing*

We fund our investments and working capital with internally generated funds, short-term debt, long-term debt, project financings, sale and lease back agreements and bonds issued in the capital markets.

#### *Our Indebtedness*

##### *Government Regulation*

The total amount of medium and long-term debt that we are allowed to incur is controlled by the Ministry of Planning, Budget and Management, through the annual budget approval process (*Plano de Dispêndio Global*, or PDG). Before issuing medium and long-term debt, Petrobras and its Brazilian subsidiaries, must also obtain the approval of the National Treasury shortly before issuance.

In accordance with Senate Resolution No. 96/89, the level of Petrobras and its Brazilian subsidiaries borrowings is subject to an annual maximum amount, exclusive of certain permitted commercial obligations, based on stockholders equity, debt service expense and other factors as of the prior year and subject to certain ongoing quarterly adjustments. For 2003, the maximum level has been initially set at U.S.\$932 million. The maximum level was set at U.S.\$824 million for 2002, U.S.\$1,211 million for 2001 and U.S.\$1,072 million for 2000.

All of the foreign currency denominated debt of Petrobras and its Brazilian subsidiaries requires registration with the Central Bank. The issuance of debt by our international subsidiaries, however, is not subject to registration with the Central Bank or approval by the National Treasury.

In addition, all issuances of medium and long-term notes and debentures require the approval of our board of directors. Borrowings that exceed the approved budget amount for any year also require approval from the Brazilian Senate.

##### *Total Indebtedness*

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Our total debt (including short-term debt, long-term debt, project financing and sale and leaseback, including current portions) increased to U.S.\$14,680 million as of December 31, 2002, from U.S.\$14,010 million as of December 31, 2001. During that same period, our short-term debt (including current portions of long-term debt obligations) declined from U.S.\$3,019 million as of December 31, 2001 to U.S.\$1,986 million as of December 31, 2002.

### Short-Term Debt

Our outstanding short-term debt serves mainly to support our imports of crude oil and oil products, and is provided almost completely by international banks and under our commercial paper program. During the last three years, we have succeeded in reducing short-term debt (excluding current portions of long-term debt obligations) to U.S.\$671 million as of December 31, 2002, as compared to U.S.\$1,101 million as of December 31, 2001 and U.S.\$3,128 million as of December 31, 2000. Our short-term debt is denominated principally in U.S. dollars.

### Long-Term Debt

Our total outstanding consolidated long-term debt consists primarily of issuance of securities in the international capital markets and debentures in the domestic capital markets and amounts outstanding under facilities guaranteed by export credit agencies and multilateral agencies, as well as financing from the *Banco Nacional de Desenvolvimento Econômico e Social* (the National Bank for Economic and Social Development, or BNDES) and other financial institutions. Outstanding long-term debt, plus the current portion of our long-term debt, totaled U.S.\$7,714 million as of December 31, 2002, as compared to U.S.\$6,848 million as of December 31, 2001 and U.S.\$5,785 million as of December 31, 2000. Included in these figures as of December 31, 2002 are the following international debt issues:

Notes	Principal Amount
4.10% Notes due 2003 <sup>(1)</sup>	¥30,000 million
9.00% Notes due 2004 <sup>(2)</sup>	EUR 91 million
10.00% Notes due 2006	U.S.\$250 million
6.625% Step Down Notes due 2007 <sup>(2)</sup>	EUR 134 million
9.125% Notes due 2007 <sup>(3)</sup>	U.S.\$500 million
9.875% Notes due 2008 <sup>(3)</sup>	U.S.\$450 million
6.750% Senior Trust Certificates due 2010 <sup>(4)</sup>	U.S.\$95 million
Floating Rate Senior Trust Certificates due 2010 <sup>(4)</sup>	U.S.\$55 million
9.750% Notes due 2011 <sup>(3)</sup>	U.S.\$600 million
6.600% Senior Trust Certificates due 2011 <sup>(4)</sup>	U.S.\$300 million
Floating Rate Senior Trust Certificates due 2013 <sup>(4)</sup>	U.S.\$300 million
4.750% Senior Exchangeable Notes due 2007 <sup>(5)</sup>	U.S.\$338 million

(1) Japanese yen; U.S.\$1.00 = ¥118.87 at December 31, 2002.

(2) Euro; U.S.\$1.00 = EUR 1.0475 at December 31, 2002.

(3) Issued by PIFCo to finance oil trading activities, with support from us through a standby purchase agreement and with insurance against 18 months of inconvertibility and transfer risk for interest payments.

(4) Represents an asset securitization by Petrobras Finance Limited.

(5) Issued by PIFCo on October 17, 2002 in connection with our acquisition of Perez Companac

If we had consolidated the financial statements of Perez Companac and Petrolera Perez Companac in our consolidated financial statements as of December 31, 2002, our total consolidated debt would have increased by U.S.\$2,455 (18.6%). As of December 31, 2002, Perez Companac had total assets of P\$13,579 million and total liabilities of P\$8,677. When we begin consolidating Perez Companac, our balance sheet and cash flows will reflect Perez Companac's financial position and cash flows. Our Strategic Plan takes this into account, and includes budgeted capital expenditures of Perez Companac in the contemplated capital expenditures of approximately U.S.\$5.1 billion related to our international operations during the period from 2003 through 2007. We plan to manage the liquidity and funding requirements of Perez Companac independently of Petrobras, so that Perez Companac funds its own capital expenditures without funding or credit support from Petrobras.

During 2003, we have successfully completed three debt issuances in the capital markets. On March 31, 2003, we issued U.S.\$400 million of 9.00% Global Step-Up Notes due 2008. These notes bear interest from March 31, 2003 at the rate of 9.00% per year until April 1, 2006 and at a rate of 12.375% thereafter. This transaction represented our first issuance under our U.S.\$8 billion universal shelf

registration statement filed with the SEC in July 2002. On May 21, 2003, Petrobras Finance Ltd., a subsidiary of PIFCo, received U.S.\$550 million in 6.436% Senior Trust Certificates due 2015, and U.S.\$200 million in 3.748% Senior Trust Certificates due 2013 in connection with our asset receivables securitization program.

In addition to issuing foreign currency denominated debt in the international capital markets, we also issue Real denominated debentures in the local capital markets. These debentures are floating rate obligations, and the coupon is based on an index plus a fixed spread. During 2002, we issued R\$1,525 million (U.S.\$432 million) in debentures, as set forth in the table below:

Debentures	Index	Spread	Principal Amount
Debentures due 2010	IGPM	10.3%	R\$770 million
Debentures due 2012	IGPM	11.0%	R\$775 million

*Project Finance and Off-Balance Sheet Arrangements*

Project Finance

Since 1997, we have utilized project financings to provide capital for our continued financing of our large exploration and production and related projects. Our arrangements with respect to these projects are accounted for as capital leases and are on-balance sheet. Under the contractual arrangements, we are responsible for completing the development of the oil and gas fields, operating the fields, paying all operating expenses relating to the projects and remitting a portion of the net proceeds generated from the fields to fund the special purpose companies' debt and return on equity payments. At the end of each financing project, we have the option to purchase the leased or transferred assets from the special purpose company.

We continue to reflect the assets related to these projects on our balance sheet as a component of property, plant and equipment and the related debt obligations are on-balance sheet and accounted for under the line item Project Financings.

Many of our capital expenditures for 2002, 2001 and 2000 were made in connection with exploration and development projects in the Campos Basin, a number of which are being financed through project financings. Below are our material project finance expenditures by project for the years ended December 31, 2002 and December 31, 2001, as well as amounts representing future commitments under our contract obligations:



Field	At	For the Year Ended December 31,		
	December 31, 2002	2002	2001	2000
	Future	Capital	Capital	Capital
	Commitments	Expenditures	Expenditures	Expenditures
	U.S.\$ in millions			
Albacora	\$ 25	\$ 45	\$ 64	\$ 113
Cabiúnas	298	26	45	83
Espadarte/Voador/Marimbá	11	103	158	224
Pargo / Carapeba / Garoupa Cherne				
PCGC		49		
Nova Marlim		106		
Marlim		2	239	316
Barracuda/Caratinga	1,084			
Others			80	79
<b>Total</b>	<b>\$ 1,148</b>	<b>\$ 331</b>	<b>\$ 586</b>	<b>\$ 815</b>

Of the U.S.\$1,433 million projected amount of expenditures for project financings in 2003, we expect that approximately U.S.\$1,136 million will be used by our Exploration and Production segment (U.S.\$756 million of which will be used in our Barracuda-Caratinga field), U.S.\$228 million by our Gas and Energy segment and U.S.\$69 million by our other segments.

#### Off Balance Sheet Arrangements

As noted above, all of our project financings are on-balance sheet. As of December 31, 2002, we had no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

#### Our Cash Flow

Net cash provided by operating activities was U.S.\$6,287 million for 2002, as compared to U.S.\$8,743 million for 2001. This decrease was due primarily to a 7.9% decrease in net operating revenues.

Net cash used in financing activities amounted to U.S.\$1,614 million for 2002, as compared to U.S.\$1,754 million for 2001. This decrease was due primarily to dividends paid and net issuances and repayments of short-term debt, which was partially offset by an increase in payments related to project financings.

#### Financing Strategy

The objective of our financing strategy is to help us achieve the targets set forth in our Strategic Plan. We aim to increase the average life of our debt portfolio and reduce our cost of capital through a variety of medium and long-term financing arrangements, including supplier financing, project financing, bank financing, securitizations and the issuances of debt and equity securities.

#### Contractual obligations

In the table below, we set forth our outstanding contractual obligations as of December 31, 2002, consisting of long-term debt including financial leases and operating leases, and the period in which the contractual obligations come due.

	Payments Due					2007 and thereafter
	Total	2003	2004	2005	2006	
	(millions of U.S. Dollars)					
Contractual obligations as of December 31, 2002:						
Long-term debt including financial leases	14,009	1,315	1,631	1,690	1,900	7,473
Operating leases	4,627	615	1,145	781	1,042	1,044

We have certain operating leases related to computers and other equipment, but the total value of such leases is not material.

### Critical Accounting Policies

The following discussion describes those areas that require the most judgment or involve a higher degree of complexity in the application of the accounting policies that currently affect our financial condition and results of operations. The accounting estimates we make in these contexts require us to make assumptions about matters that are highly uncertain. In each case, if we had made other estimates, or if changes in the estimates occur from period to period, our financial condition and results of operations could be materially affected.

The discussion addresses only those estimates that we consider most important based on the degree of uncertainty and the likelihood of a material impact if we used a different estimate. There are many other areas in which we use estimates about uncertain matters, but the reasonably likely effect of changed or different estimates is not material to our financial presentation.

*Oil and Gas Reserves*

Evaluations of oil and gas reserves are important to the effective management of upstream assets. They are used to help make investment decisions about oil and gas properties. Oil and gas reserve quantities are also used as the basis of calculating the unit-of-production rates for depreciation and evaluating for impairment. Oil and gas reserves are divided between proved and unproved reserves. Proved reserves are estimated quantities of crude oil, natural gas and natural gas liquids that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, i.e., prices and costs as of the date the estimate is made. Unproved reserves are those with less than reasonable certainty of recoverability and are classified as either probable or possible. Probable reserves are reserves that are more likely to be recovered than not and possible reserves are less likely to be recovered than not.

The estimation of proved reserves is an ongoing process that takes into account engineering and geological information such as well logs, pressure data, fluid sample core data and others. Proved reserves can also be divided in two categories: developed and undeveloped. Developed proved reserves are expected to be recovered from existing wells including reserves behind pipe, or when the costs necessary to put them in production are relatively low. For undeveloped proved reserves significant investments are necessary, including drilling new wells and installing production or transportation facilities.

We use the successful efforts method to account for our exploration and production activities. Under this method, costs are accumulated on a field-by-field basis with certain exploratory expenditures and exploratory dry holes being expensed as incurred. Exploratory wells that find oil and gas in an area requiring a major capital expenditure before production can begin are evaluated annually to ensure that commercial quantities of reserves have been found or that additional exploration work is under way or planned. Exploratory well costs not meeting either of these tests are charged to expense. Costs of productive wells and development dry holes are capitalized and amortized on the unit-of-production method because it provides a more timely accounting of the success or failure of our exploration and production activities. If the full cost method were used, all costs would be capitalized and depreciated on a field by-field basis. The capitalized costs would be subject to an impairment test by country. The full cost method would tend to delay the expense recognition of unsuccessful projects.

*Impact of Oil and Gas Reserves on Depreciation*

The calculation of unit-of-production depreciation is a critical accounting estimate that measures the depreciation of upstream assets. It is the ratio of (1) actual volumes produced to (2) total proved developed reserves (those proved reserves recoverable through existing wells with existing equipment and operating methods) applied to the (3) asset cost. The volumes produced and asset cost are known and while proved developed reserves have a high probability of recoverability they are based on estimates that are subject to some variability. This variability may result in net upward or downward revisions of proved reserves in existing fields, as more information becomes available through research and

production. We revised our proved reserves in the last three years, increasing our proved reserves by 917.4 million barrels of oil equivalent in 2002, decreasing our proved reserves by 880.8 million barrels of oil equivalent in 2001 and increasing our proved reserves by 771.4 million barrels of oil equivalent in 2000. While the revisions we have made in the past are an indicator of variability, they have had a small impact on the unit-of- production rates because they have been small compared to our large reserves base.

#### Impact of Oil and Gas Reserves and Prices on Testing for Impairment

Oil and gas producing properties are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. We estimate the future undiscounted cash flows of the affected properties to judge the recoverability of carrying amounts. In general, analyses are based on proved reserves, except in circumstances where it is probable that additional non-proved reserves will be developed and contribute to cash flows in the future.

We perform asset valuation analyses on an ongoing basis as a part of our management program. These analyses monitor the performance of assets against corporate objectives. They also assist us in reviewing whether the carrying amounts of any of our assets may not be recoverable. In addition to estimating oil and gas reserve volumes in conducting these analyses, it is also necessary to estimate future oil and gas prices.

In general, we do not view temporarily low oil prices as a trigger event for conducting the impairment tests. The markets for crude oil and natural gas have a history of significant price volatility. Although prices will occasionally drop precipitously, industry prices over the long term will continue to be driven by market supply and demand fundamentals. Accordingly, any impairment tests that we perform make use of our long-term price assumptions for the crude oil and natural gas markets. These are the same price assumptions that are used in our planning and budgeting processes and our capital investment decisions.

#### *Pension and Other Post-Retirement Benefits*

Determination of the projected benefit obligations for the company's defined benefit pension and postretirement plans are important to the recorded amounts for such obligations on the balance sheet and to the amount of benefit expense in the income statement. The actuarial determination of projected benefit obligations involves judgment about uncertain future events, including estimated retirement dates, salary levels at retirement, mortality rate, rates of return on plan assets, future health care cost trends, and rates of utilization of health care services by retirees. Due to the specialized nature of these calculations, the company engages outside actuarial firms to assist in the determination of these projected benefit obligations.

Each of these assumptions reflects estimates that are highly uncertain for a number of reasons, including uncertainty regarding long-term economic conditions in Brazil. Notwithstanding changes in inflation, interest rates and other economic variables, we have not

changed the assumptions, because the uncertainty concerning long-term developments in the Brazilian economy makes it difficult to apply the principles set forth in U.S. GAAP and to agree on specific assumptions. We may change these assumptions in the future, and any such changes could have a material effect on reported liabilities and, to a lesser extent, on reported earnings.

In particular, we believe that the weighted average discount rate that we apply to determine the present value of our future obligations for pensions and other post-retirement obligations may be subject to revision to reflect changes in the Brazilian financial markets. U.S. GAAP require that the discount rate reflect the price at which the pension benefits could be effectively settled, and encourage the use of rates of return on high-quality fixed-income investments currently available and expected to be available in the market. In recent years, the Brazilian government has issued long-term inflation-indexed securities that are traded in an increasingly liquid market. We believe that the high rates of return on these securities suggest that it would be appropriate to increase the discount rate assumption, but there are interpretive problems under U.S. GAAP with this view and with increasing the spread between the discount rate assumption and the assumed rate of future increase in compensation. We are currently discussing these issues with our auditors and actuaries, and these discussions could result in a change in assumptions in the near future. Such a change could have a significant effect on the amount of our pension liability and expense.

#### *Litigation and Other Contingencies*

Claims for substantial amounts have been made against us. We are sometimes held liable for spills and releases of oil products and chemicals from our operating assets. In accordance with the guidance provided by U.S. GAAP, we accrue for these costs when it is probable that a liability has been incurred and reasonable estimates of the liability can be made. Significant management judgment is required to comply with this guidance and it includes management's discussion with our attorneys, taking into account all of the relevant facts and circumstances. We believe that payments required to comply with these laws and regulations will not have a material adverse effect on our operations or cash flows.

#### **Recent Accounting Pronouncements**

The Financial Accounting Standards Board ( FASB ) has recently issued the following Statements of Financial Accounting Standards ( SFAS ):

In August 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 143, Accounting for Asset Retirement Obligations, (SFAS No. 143) which significantly changes the method of accruing for costs associated with a company's legal obligation to retire fixed assets.

We adopted SFAS 143, as required, on January 1, 2003 and its primary impact was to change the method of accruing for upstream site restoration costs. Under SFAS 143, the discounted fair value of asset retirement obligations will be recorded as liabilities when they are incurred, which are typically at the time the related assets are installed. These costs were previously accrued ratably over the productive lives of the assets in accordance with SFAS No. 19, Financial Accounting and Reporting by Oil and Gas Producing Companies. At December 31, 2002, the cumulative amount accrued under SFAS 19 was U.S.\$1,166 million. The cumulative adjustment for the change in this accounting principle as of March 31, 2003, was an after-tax income of U.S.\$697 million (net of U.S.\$359 million of income tax effects). The accounting change led to a U.S.\$7 million increase in property, plant and equipment, a U.S.\$1,056 million reduction to the accrued liability and a U.S.\$359 million increase in deferred income tax liabilities.

This adjustment is due to the difference in the method of accruing site restoration costs under SFAS 143 compared with the method required by SFAS 19. Under SFAS 19, site restoration costs are accrued on a unit-of-production basis of accounting as the oil and gas are produced. The SFAS 19 method matches the accrual with the revenues generated from production and results in most of the costs being accrued in early field life when production is at the highest level. Because SFAS 143 requires accretion of the liability as a result of the passage of time using an effective interest method of allocation, the majority of the costs will be accrued towards the end of field life, when production is at the lowest level. The cumulative income adjustment described above results from reversing the higher liability accumulated under SFAS 19 in order to adjust it to the lower present value amount resulting from transition to SFAS 143. This amount being reversed in transition, which was previously charged to operating earnings under SFAS 19, will again be charged to earnings under SFAS 143 in future years.

We primarily determine depreciation, depletion and amortization based on cost less estimated salvage value of the asset, under either the unit-of-production method or the straight-line method. Unit-of-production rates are based on oil and gas reserves estimated to be recoverable from existing facilities. The straight-line method is based on estimated asset service life taking obsolescence into consideration. Service lives generally extend to 30 years for pipelines and 25 years for building and improvements and reflect our long-term commitment to effective asset optimization.

In July 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities. This statement requires recognition of costs associated with exit or disposal activities when they are incurred rather than when an exit or disposal plan occurs. Examples of costs covered by this guidance include lease termination costs, employee severance costs that are associated with a restructuring of discontinued operations, plant closings or other exit or disposal activities. The provisions of this statement are effective for fiscal years beginning after December 31, 2002 and will impact any exit or disposal activities initiated after January 1, 2003.

In April 2002, the FASB issued SFAS No. 145, Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections. This statement addresses how to report gains or losses resulting from the early extinguishment of debt. Under current accounting rules, any gains or losses are reported on early extinguishment of debt as extraordinary items. If SFAS No. 145 is adopted, a company would be required to evaluate whether the debt extinguishment is truly extraordinary in nature. If the debt is routinely extinguished early, the gain or loss would be included in income from continuing operations. This statement would be effective for 2003 year-end reporting. We have not yet assessed the impact of SFAS No. 145 on our financial results.

We are beginning to assess the impact of SFAS No. 145 and No. 146 and therefore, at this time cannot reasonably estimate the effect of these statements on our financial condition, result of operations and cash flows.

### Research and Development

Since 1966, we have maintained a dedicated research and development facility in Rio de Janeiro, Brazil. As of April 30, 2003, we had 1,311 employees working in this facility. We engage in joint research projects with universities and other research centers in Brazil and abroad. We spent U.S.\$23.0 million in 2002 on joint projects with Brazilian universities and technological institutions. Additionally, we participate in technology exchange and assistance projects with other oil and gas and oilfield service companies for other areas of our business. These transfers of technology are based on partnership agreements focusing on the exchange of information with respect to offshore systems and development of deepwater technologies and involve no material cost to us.

Our research and development facility researches various aspects of our oil and gas operations, including exploration, drilling, production, reservoir engineering and geology, fluid separation, well completion and refining process technology. This facility also engages in research on industrial catalysts, lubricants, fine chemicals, fuels, additives, petrochemicals and polymers for other areas of our business. Our research facility is also responsible for the basic design of new offshore fixed and semi-submersible platforms and subsea production systems, as well as new and reconstructed refining units, and has facilitated the development of important technologies, including semi-submersible production platforms capable of operating in water depths of up to 6,562 feet (2,000 meters).

As of December 31, 2002, we had 27 floating production systems in operation (14 semi-submersibles, 12 FPSO and 1 FSO), 24 of which we engineered. We have obtained 80 patents in Brazil and abroad for a significant number of the technologies produced through research and development activities during the three-year period ended December 31, 2002.

Of the projects in which we are currently involved, three programs are key to our technological development activities. The first project, originally named PROCAP 2000, is our technological development program for deepwater production systems, which was established in 1993 with a budget of U.S.\$52 million to develop additional deepwater and ultra deepwater technology. This program aimed to enhance recovery of oil and gas reserves and to extend the life of wells located at depths greater than 984 feet (300 meters). The program was extended for two additional years after the expiration of the initial term and was finalized in December 1999 through an increase of R\$12.2 million (approximately U.S.\$7 million) to the original PROCAP 2000 budget. In 2000, PROCAP 3000 was launched with a budget of U.S.\$128 million over three to four years to provide technological solutions to produce and support the

next phases of development of Marlim Sul, Roncador, Albacora Leste and Albacora in order to achieve production and extraction in water depths beyond 9,842 feet (3,000 meters) a reality.

The second project, the Advanced Oil Recovery Program PRAVAP, is designed to increase our oil reserves and production through the improvement of our recovery factor from mature oil development areas. The program was established in 1993 to complete seven projects in five years with an estimated budget of U.S.\$53 million. The program is now focused predominantly on reservoirs in the Campos Basin, where the greatest known reserves are located.

The third project, the Strategic Refining Technology Development Program PROTER, was established in 1994 to assist our refineries in reducing costs, refining greater volumes of heavy oils, and meeting increased demand for higher quality products. The 2003 budget for this program is U.S.\$0.5 million. Work done under this program has led to the development of technologies used by our fluid catalytic cracking (FCC) units, including a residue cracking process specifically developed for use with heavy and acidic types of Brazilian oils found in the Cabiúnas and Marlim fields.

Our research center is also involved in technology exchange and assistance projects in partnership with other oil companies such as: Royal Dutch/Shell (subsea completion, floating production systems, hydrates and paraffins); Texaco (deep water exploration and production); AGIP (pressure phase of the development of the vertical annular separation and pumping systems); BP/STATOIL (floating production systems, risers, deepwater drilling and subsea technology); and Chevron (pipeline transportation) as well as with a number of prominent international universities and other institutes.

Our total expenditures on research and development at our dedicated research and development facility were U.S.\$147 million in 2002, U.S.\$132 million in 2001 and U.S.\$ 152 million in 2000.

#### *Trend Information*

For a description of trends that might affect our financial condition and results of operation, see Item 4 Information on the Company Competition .

## **ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES**

### **Directors and Senior Management**

#### *Our Board of Directors*

Our board of directors is composed of a minimum of five and a maximum of nine members and is responsible for, among other things, establishing our general business policies. The members of the board of directors are elected at the annual general meeting of shareholders.

Under Brazilian Corporation Law, shareholders representing at least 10% of the company's voting capital have the right to demand that a cumulative voting procedure be adopted to entitle each common share to as many votes as there are board members and to give each common share the right to vote cumulatively for only one candidate or to distribute its votes among several candidates.

Furthermore, our bylaws enable each of (i) minority preferred shareholders that together hold at least 10% of the total capital stock (excluding the controlling shareholders); and (ii) minority common shareholders, to elect one member and an alternate to our board of directors. Additionally, according to Law No. 10,683 of May 28, 2003, one of the members of the board of directors is appointed by the Minister of Budget and Management. Our bylaws provide that, independently from the exercise of the rights above granted to minority shareholders, the Federal Government always has the right to appoint the

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majority of our directors. The maximum term for a director is one year, but re-election is permitted. In accordance with the Brazilian Corporation Law, the shareholders may remove any director from office at any time with or without cause at an extraordinary meeting of shareholders. Following an election of board members under the cumulative vote procedure, the removal of any board member by an extraordinary meeting of shareholders will result in the removal of all the other members, after which new elections shall be held.

We currently have nine directors. The following table sets forth certain information with respect to these directors:

### BOARD OF DIRECTORS

Name	Date of Birth	Position	Expiration of Current Term	Business Address
Dilma Vana Rousseff <sup>(1)</sup>	Dec. 14, 1947	Chairman	March 2004	Esplanada dos Ministérios, Bloco U, sala 801 70065-900 Brasília DF
Jaques Wagner <sup>(1)</sup>	Mar. 16, 1951	Member	March 2004	Esplanada dos Ministérios, Bloco F 5º andar - 70059-900 Brasília DF
Antonio Palocci Filho <sup>(1)</sup>	Oct. 4, 1960	Member	March 2004	Esplanada dos Ministérios, Bloco P 5º andar - Ministério da Fazenda MF 70048-900 Brasília DF
José Eduardo de Barros Dutra <sup>(1)</sup>	Apr. 11, 1957	Member	March 2004	Av. República do Chile, 65 23º andar 20035-900 Centro Rio de Janeiro RJ
Gleuber Vieira <sup>(1)</sup>	Dec. 08, 1933	Member	March 2004	Rua Álvaro Moreira, 129 Condomínio Jardim Marapendi 22630-160 Barra da Tijuca RJ
Gerald Dinu Reiss <sup>(1)</sup>	Oct. 28, 1944	Member	March 2004	Rua Viradouro, 63 Conjunto 131 13º andar Bairro Itaim Bibi 04538-110 São Paulo SP
Claudio Luiz da Silva Haddad <sup>(1)</sup>	Aug. 23, 1946	Member	March 2004	Rua Jeronimo da Veiga, 45 13º andar Bairro Itaim Bibi 04536-000 São Paulo SP
Fabio Colletti Barbosa <sup>(2)</sup>	Oct. 3, 1954	Member	March 2004	Av. Paulista, 1374 3º andar Cerqueira César 01310-916 São Paulo SP
Jorge Gerdau Johannpeter <sup>(3)</sup>	Dec. 8, 1936	Member	March 2004	Av. Farrapos, 1811 90220-005 Porto Alegre RS

(1) Appointed by the controlling shareholder.

(2) Appointed by the minority common shareholders.

(3) Appointed by the minority preferred shareholders.

**Dilma Vana Rousseff** - Ms. Rousseff has been a member of our board of directors since January 3, 2003 and was appointed chairman of the board of directors of our company and BR on January 3, 2003. Since January 1, 2003, she has held the post of Minister of Mines and Energy of Brazil. She has also served as: State Secretary of Energy, Mines and Communications of the State of Rio Grande do Sul (1993-1994 and 1999-2002); President of the *Fundação de Economia e Estatística do Estado do Rio Grande do Sul* (Economy and Statistics Foundation of the State of Rio Grande do Sul, 1991-1993); and Secretary of Finance of Porto Alegre (1986-1988). Ms. Rousseff has also participated in the Governmental Transition Team as Coordinator of the Infrastructure Group.

**Jaques Wagner** - Mr. Wagner has been a member of our board of directors since February 17, 2003 and is also a member of the board of directors of BR. Since January 1, 2003, he has held the post of Minister of Labor and Employment. He has also served as: Representative before the Brazilian House of Representatives (1990-2002) and founder and director of the *Sindicato dos Trabalhadores na Indústria Química do Estado da Bahia* (State of Bahia Chemical Industry Workers Union, 1981-present). Mr. Wagner is also a founder of the Workers Party and the *Central Única dos Trabalhadores* (Workers Unified Organization) in the State of Bahia.

**Antonio Palocci Filho** - Mr. Palocci has been a member of our board of directors since January 3, 2003 and is also a member of the board of directors of BR. Since January 1, 2003, he has held the post of Minister of Finance of Brazil. He has also served as: Mayor of Ribeirão Preto (2000-2002 and 1993-1996); Representative before the Brazilian House of Representatives (1999-2000); Representative before the State of São Paulo House of Representatives (1991-1992); and Councillor for the Municipality of



Ribeirão Preto (1989-1990). Mr. Palocci has also served as President of the *Partido dos Trabalhadores* (Workers Party) for the State of São Paulo (1997-1998).

**José Eduardo de Barros Dutra** - Mr. Dutra has been a member of our board of directors since January 3, 2003 and is also a member of the boards of directors of BR, Petrobras Energia Participaciones S.A. and Petrobras Energia S.A. In January 2003, the President of Brazil appointed him our president. He has also served as: Senator of the Republic of Brazil from the State of Sergipe (1995-2003) and President of the Sindicato dos Mineiros do Estado de Sergipe (State of Sergipe Miners Union, 1989-1994). Mr. Dutra has also served as leader of the Workers Party (1996-1997) and member of the Workers Party National Executive Committee, and has worked as a geologist on various projects.

**Gleuber Vieira** - Mr. Vieira has been a member of our board of directors since January 3, 2003 and is also a member of the board of directors of BR. Since 1995, he has been a General of the Brazilian Army. He has also served as: Chief of the *Departamento de Ensino e Pesquisa* (Learning and Research Department) of the Brazilian Army (1995-1997); Chief of the Brazilian Army (1999-2002); and Minister of the Army (1999-2002).

**Gerald Dinu Reiss** - Mr. Reiss has been a member of our board of directors since January 22, 2003 and is also a member of the board of directors of BR. He is currently also a vice-president of Cevekol S.A. Indústria e Comércio de Produtos Químicos, a managing partner of Consemp Consultoria e Empreendimentos Industriais Ltda. and a member of the board of directors of several public and private sector companies. Mr. Reiss has also served as a member of the board of directors of Grow Jogos e Brinquedos S.A. (1972-1991) and Director of Planning and Development for Grupo Ultra (1980-1986).

**Claudio Luiz da Silva Haddad** - Mr. Haddad has been a member of our board of directors since January 22, 2003 and is also a member of the board of directors of BR. Since March 1999, he has been President and partner of Ibmecc Educacional S.A., a business and economics school in Brazil, and since January 2001, he has been the President of the board of directors of IBTS S.A., a professional information technology and telecommunications training entity. He has also served as: Chief Executive Officer of Banco de Investimentos Garantia S.A. (1992-1998); Partner and Director of Banco de Investimentos Garantia S.A., responsible for the Corporate Finance Division and subsequently for all the Investment Banking Division (1983-1992); and Director of the Central Bank of Brazil, responsible for public debt and open market operations (1980-1983).

**Fabio Colletti Barbosa** - Mr. Barbosa has been a member of our board of directors since January 3, 2003 and is also a member of the board of directors of BR. Since 1998, he has been the Chief Executive Officer of the Banco ABN Amro Real S.A. He has also served as: Chief Executive Officer of ABN Amro Bank/São Paulo (1996-1998); Director of Corporate Banking & Finance of ABN Amro Bank/São Paulo (1995-1996); President of LTCB Latin America Ltda. (1992-1995); and member of the Treasury Department of Nestlé (1974-1986). Mr. Barbosa is also a member of the board of directors and the executive board of the *Federação Brasileira das Associações de Bancos* (Brazilian Bank Associations Federation - FEBRABAN) and of the *Conselho de Desenvolvimento Econômico e Social do Governo Federal* (Brazilian Government Social and Economic Development Council).

**Jorge Gerdau Johannpeter** - Mr. Johannpeter has been a member of our board of directors since October 19, 2001 and is also a member of the board of directors of BR. He also serves as: President of the board of directors of Gerdau Group, a steel company; coordinator of *Ação Empresarial Brasileira* (Brazilian Corporate Action), a non-governmental Brazilian organization addressing developmental issues; leader of *Programa Gaúcho da Qualidade e Produtividade* (Program for Quality and Productivity of the State of Rio Grande do Sul, or PGQP), which works with the public and private sectors in the implementation of total quality management; representative of the American Society for Quality (ASQ) in Brazil; President of *Conselho do Prêmio Qualidade do Governo Federal* (Brazilian Government Quality

Prize Council); Director and Vice-President of *Instituto Brasileiro de Siderurgia* (the Brazilian Steel Institute, or the IBS); Chairman of the board of directors of *Aço Minas Gerais Açominas*; President of *Conselho Superior do Movimento Brasil Competitivo* (Competitive Brazil Movement Superior Council, or MBC); member of the Brazilian Government Social and Economic Development Council.

*Our Executive Officers*

Our board of executive officers, composed of one president and up to six executive officers, is responsible for our day-to-day management. Under our bylaws, the board of directors is entitled to elect the executive officers, including the president. The president must be chosen from among the members of the board of directors. All of the executive officers must be Brazilian nationals and reside in Brazil. The maximum term for executive officers is three years, but re-election is permitted. The board of directors may remove any executive officer from office at any time with or without cause. Four of the current executive officers are experienced managers, engineers or technicians from Petrobras, one of whom has served on the board of directors of one of our subsidiaries.

The following table sets forth certain information with respect to our executive officers:

**EXECUTIVE OFFICERS**

Name	Date of Birth	Position
José Eduardo de Barros Dutra	April 11, 1957	President
J. S. Gabrielli de Azevedo	October 3, 1949	Chief Financial Officer and Investor Relations Officer
Renato de Souza Duque	September 29, 1955	Manager of Corporate Services
Guilherme de Oliveira Estrella	April 18, 1942	Manager of Exploration and Production
Rogério Almeida Manso da Costa Reis	March 15, 1957	Manager of Refining, Transportation and Marketing
Ildo Luís Sauer	September 3, 1954	Manager of Gas and Power
Nestor Cuñat Cerveró	August 15, 1951	Manager of International Activities

**José Eduardo de Barros Dutra** - Mr. Dutra has been President of our company since January 3, 2003 and has been a member of our board of directors since January 3, 2003. For biographical information regarding Mr. Dutra, see Directors and Senior Management Our Board of Directors.

**J. S. Gabrielli de Azevedo** Mr. Gabrielli has been our Chief Financial Officer and Investor Relations Officer since January 31, 2003. Currently, Mr. Gabrielli is also a member of the boards of directors of Petrobras Energia Participaciones S.A. and of Petrobras Energia S.A. He served as dean of the Economic Sciences School of the Federal University of Bahia and superintendent of the *Fundação de Apoio a Pesquisa e Extensão* (Foundation for Support of Research and Extension Fapex). He was also a visiting researcher at the London School of Economics and Political Science in 2000 and 2001.

**Renato de Souza Duque** Mr. Duque has been our Manager of Corporate Services since January 31, 2003. Currently, Mr. Duque is also a member of the boards of directors of Petrobras Energia Participaciones S.A., Petrobras Energia S.A. and Petrobras Gás S.A. GASPETRO and Chief Executive Officer of Petrobras Negócios Eletrônicos S.A. He has been at our company since 1978, where he has held several positions, including: Manager of Human Resources for all of our operational units in the Exploration and Production area; Manager of Drilling Operations in the Campos Basin; and Manager of our owned platforms.

**Guilherme de Oliveira Estrella** Mr. Estrella has been our Managing Director of Exploration and Production since January 31, 2003. Currently, Mr. Estrella is also a member of the boards of directors and executive boards of Petrobras Energia Participaciones S.A. and Petrobras Energia S.A., and also serves as Chairman of the Board of the *Instituto Brasileiro de Petróleo e Gás* (Brazilian Oil and Gas Institute). He worked at our company from 1965 until 1994, when he retired as a geologist of our Exploration Department. Before his retirement, he held several other positions, including: General Superintendent

(1989-1993); Superintendent of Research and Development for exploration, drilling and production (1985-1989); Head of the Exploration Division (1981-1985); Head of the Organic Geochemistry Sector (1981); Head of the Brazilian East Coast Basin Interpretation Sector of our Exploration Department - DEPEX/RJ (1978-1981); and Exploration Manager of Petrobras Internacional S.A. BRASPETRO for Iraq (1976-1978). Mr. Estrella has also served as director of the *Instituto Brasileiro de Petróleo e Gás* (Brazilian Oil and Gas Institute) of which he is now the Chairman of the Board.

**Rogério Almeida Manso da Costa Reis** Mr. Reis has been our Director of Refining, Transportation and Marketing since September 10, 2001. Currently, Mr. Reis is also a member of the boards of directors of Petrobras Energia Participaciones S.A., Petrobras Energia S.A., Companhia Petroquímica do Sul (Copesul) and the Alberto Pasqualini Refinery and a director of Petrobras Internacional Finance Company (PIFCo). He joined our company in 1979 and has held several positions, including Marketing Director, Logistics and Supply Manager. He has also served as Sales Manager of the Commercial Office in New York which purchased and marketed oil refined by Petrobras (1986-1990).

**Ildo Luís Sauer** Mr. Sauer has been our Manager of Natural Gas and Power since January 31, 2003. Currently, Mr. Sauer is also a member of the boards of directors of Petrobras Energia Participaciones S.A. and Petrobras Energia S.A. He is a Professor of the *Instituto de Eletrotécnica e Energia da Universidade de São Paulo* (Electrotechnical and Energy Institute of the University of São Paulo) since 1991 and has served as an analyst and policy formulator for the energy sector for the past ten years. Mr. Sauer has also worked as a consultant at TecSauer Consultoria Ltda., where he provided consulting services for several entities, and nuclear reactor development project manager at the Brazilian Navy (1986-1989).

**Nestor Cuñat Cerveró** - Mr. Cerveró has been our Manager of International Activities since January 31, 2003. Currently, Mr. Cerveró is also a member of the boards of directors of Petrobras Energia Participaciones S.A. and Petrobras Energia S.A. He has worked at our company since 1975, where he held several positions, including: Energy Manager, *Programa de Termelétricas* (Thermoelectrical Plants Program); Thermoelectrical Plants Manager of the Participations Superintendency; assistant to the CEO for the development of new ventures and partnerships; and Head of the Energy Sector of our industrial area. He has also represented our company at the boards of directors of several thermoelectrical energy companies and acted as assistant to the *Presidência da Comercializadora Brasileira de Energia Emergencial* (Presidency of the Brazilian Supplier of Emergencial Energy - CBEE) of the Ministry of Mines and Energy.

## Compensation

For the year ended December 31, 2002, the aggregate amount of compensation we paid to all members of the board of directors and executive officers was approximately U.S.\$921 thousand.

In addition, the members of the board and the executive officers receive certain additional benefits generally provided to our employees and their families, such as medical assistance, educational expenses and supplementary social security benefits.

We have no service contracts with our directors providing for benefits upon termination of employment. We do not have a compensation committee.

We currently sponsor a defined benefit plan known as PETROS and have established a new contributory benefit pension plan known as Petrobras VIDA, which is being legally challenged by the Oil Workers Federation and has not yet been implemented. For more information, see Employees and Labor Relations - Our Pension Fund.

**Indemnification of Officers and Directors**

Our bylaws require us to defend our senior management in administrative and legal proceedings and to maintain insurance coverage to protect senior management from liability arising from the performance of their functions. Subject to certain limitations, the policy reimburses losses and expenses incurred by us due to wrongful acts of our directors and officers, such as breach of duty, neglect, error, misstatement, misleading statements, omission or acts by our directors and officers in the performance of their position, or any matter claimed against them solely by reason of their functions or positions, including the purchase or sale of our securities. Coverage includes the advancement of defense costs.

**Share Ownership**

As of April 30, 2003, the members of our board of directors, our executive officers, the members of our audit committee, and close members of their families, as a group, beneficially held a total of 1,512 common shares and 1,937 preferred shares of our company. Accordingly, on an individual basis, and as a group, our directors, executive officers, audit committee members, and close members of their families beneficially owned less than one percent of any class of our shares. The shares held by our directors, executive officers, audit committee members, and close members of their families have the same voting rights as the shares of the same type and class that are held by our other shareholders. None of our directors, executive officers, audit committee members, or close members of their families holds any options to purchase common shares or preferred shares, and there are no arrangements for involving our employees in the capital of our company.

**Audit Committee**

Brazilian corporation law requires us to establish a permanent audit committee. Accordingly, our bylaws provide for a permanent audit committee composed of up to five members. A person elected to serve on this committee must be a resident of Brazil and either be a university graduate or have been a company officer or audit committee member of a Brazilian company for at least three years prior to election to the committee. Under our bylaws, the members and their respective alternates are elected by the shareholders at the annual general shareholder meeting. Holders of preferred shares without voting rights and minority common shareholders, other than the Brazilian government, are each entitled to elect one member and his respective alternate to the audit committee. Under our bylaws, one member and his respective alternate are appointed by the Minister of Finance representing the Treasury. The Federal Government has the right to appoint the majority of the members of the audit committee and their alternates. None of the members of our audit committee is a member of our board of directors.

The following table sets forth certain information with respect to our audit committee:

**AUDIT COMMITTEE**

Name	Position
Eduardo Coutinho Guerra	Chairman
Ronaldo Jorge Araújo Vieira Junior	Member
Túlio Luiz Samin	Member
Nelson Rocha Augusto	Member
Maria Lúcia de Oliveira Falcón	Member

**Employees and Labor Relations**

We had 40,848 employees as of December 31, 2002, compared to 38,483 as of December 31, 2001 and 38,908 as of December 31, 2000. The increase in the number of our employees in 2002 was

due to normal hiring practices related to our business requirements. Expenses relating to employees of the parent company amounted to approximately R\$3,019 million (U.S.\$1,033 million) in 2002, R\$2,966 million (U.S.\$1,260 million) in 2001 and R\$2,636 million (U.S.\$1,441 million) in 2000. During 2002, these expenses represented 83% of our consolidated employee expenses. Of the 34,520 employees of the parent company, as of December 31, 2002, 33,503, or 97%, were classified as onshore employees and 3% were classified as offshore employees. Employees who work on ships are classified as offshore employees, while all others are considered onshore employees. We also subcontract certain services, such as data processing, security and cleaning.

All of our employees, except the maritime employees, are subject to a collective bargaining agreement with the Oil Workers Unified Federation, which we signed on December 4, 2002, retroactive to September 1, 2002, and which will expire on August 31, 2003. On December 27, 2002, we signed a collective bargaining agreement with the maritime employees union, retroactive to November 1, 2002, which will expire on October 31, 2003. Our collective bargaining agreements are subject to renewal on an annual basis. Under the terms of these agreements, we agreed to:

increase the salary of oil workers by 7.4%, to be applied retroactively from September 2002;

subsidize 70% of primary school costs for the children of our employees, subject to a cap; and

establish safety commissions to prevent accidents on offshore platforms in the Campos Basin.

On October 19, 2001, our oil workers began a five-day strike. The cause of the strike was a dispute over wage increases during the negotiations of the collective bargaining agreement for 2001. This strike caused a decrease in oil production of four million barrels for the five-day period. On May 3, 2002, oil workers held a one-day strike, due to a dispute over our profit-sharing proposal, causing no material decrease in oil production. Neither of the strikes affected our average production targets for 2001 or 2002 or our level of oil imports. A labor strike has not caused a material decrease in production since 1995, when a 30-day strike by the oil workers was held to protest the amendment to the Brazilian constitution under which we ceased to be the Brazilian government's exclusive agent in the Brazilian hydrocarbon industry. The strike caused a significant decrease in our production and refining output and led to a substantial increase in the level of our imports.

We provide approximately three million hours of annual training to our employees at our training centers (*Universidade Corporativa*). Despite budget limitations, we have been able to maintain this total number of training hours as a result of improved training processes. We spent approximately U.S.\$30 million on employee training in 2002, and we intend to spend U.S.\$50 million on employee training in 2003.

With the enactment of the Oil Law and the emergence of competitors in the Brazilian oil sector, we have developed a strategic plan to provide incentives to attract new employees and to retain existing ones. We have also implemented a management improvement plan, which will focus on training our management-level employees to enable them to develop the skills necessary to operate in a free-market economy. As part of our employee incentives, we plan to include more flexible compensation packages, merit-based promotions and, as permitted by Brazilian law, a profit sharing plan with predetermined criteria. Pursuant to this plan, the amount of the profit sharing will be determined by negotiation with the labor unions representing our employees. However, under Brazilian law, the profit sharing plan will be subject to an annual limit equal to 25% of total proposed dividends for the year.

Our profit sharing distributions to our employees were R\$444 million (U.S.\$152 million) for 2002, R\$416 million (U.S.\$168 million) for 2001 and R\$307 million (U.S.\$159 million) for 2000. At the annual general shareholders' meeting held on March 27, 2003, our shareholders approved a profit sharing distribution to our employees of R\$380 million (U.S.\$108 million) for the year ended December 31, 2002, which was distributed in May 2003, and our subsidiaries approved profit sharing distributions to their employees of R\$64 million (U.S.\$22 million) at their annual general shareholders' meeting in March 2003.

*Our Pension Fund*

We sponsor a contributory defined benefit pension plan known as PETROS, which covers substantially all of our employees. The principal objective of PETROS has been to supplement the social security pension benefits of our employees, as well as employees of our subsidiaries and affiliates, certain other companies and PETROS itself. Our historical funding policy has been to make annual contributions to the plan in the amount determined by actuarial appraisals. Contributions are intended to provide not only for benefits attributed to service to date but also for those expected to be earned in the future. We recorded a liability of U.S.\$1,452 million in 2002, U.S.\$ 2,088 million in 2001 and U.S.\$ 3,308 million in 2000 for the excess of the actuarial value of our obligation to provide future benefits over the fair value of the plan assets used to satisfy that obligation. See Note 14 to our audited consolidated financial statements.

On May 11, 2001, our board of directors approved the creation of a new mixed benefit plan for existing, active and inactive employees. The new plan, Petrobras VIDA, is designed to attract and retain qualified professionals and to reduce our pension obligations.

The principal characteristics of the plan are the following:

migration to the plan is voluntary;

for qualifying active employee participants, the benefits (rights proportional to the time of migration) as calculated by the terms of the old plan will be settled by us with the pension fund. The pension fund will credit the accounts of these participants with a supplementary retirement benefit, guaranteed by us;

the benefits paid by PETROS to retirees and pensioners will now be restated according to the IPCA and will no longer be influenced by our changes to active employees' salaries. In the case of participants that choose not to migrate, certain parity rules of the participants' defined benefit will be applicable;

we will reduce our contribution to the pension plan from 12.9% to 8.0% of the payroll (on average); and

the plan will have the characteristics of a defined contribution plan for normal plan benefits and of a defined benefit plan for certain risk benefits. No deficits will occur in the employee's individual account during the employee's accrual period. After provision of the supplementary retirement benefit to the qualifying participants, any deficit in the fund balance will be funded equally by the beneficiaries and by us.

The *Secretaria de Previdência Complementar* (Supplemental Pension Plan Secretariat), the government entity empowered to authorize the creation of pension plans in Brazil, and other relevant authorities, approved the plan on September 20, 2001.

On November 23, 2001, the Oil Workers Federation, which represents approximately 96.7% of our workers, filed a lawsuit against the Supplemental Pension Plan Secretariat, seeking to prevent the approval of Petrobras VIDA. Although some employees had already opted to migrate to the plan, an injunction was granted on January 10, 2002, which resulted in the suspension of the new plan and prevented us from including any employees under this plan. Since the PETROS plan is not admitting new participants since August 9, 2002, employees hired since that date are covered by specific insurance policies, and will continue to be covered by such policies until we are able to offer them a supplemental pension plan.

If Petrobras VIDA becomes effective, our goal is to migrate existing participants in the PETROS plan to the new plan and permit new employees to participate in the new plan. The actual costs of closing participation in PETROS and migrating participants will depend on the level of migration. We expect that, if migration is allowed to resume, the new plan will be the principal employee benefit plan for our employees. We do not expect that the additional costs of implementing the new plan and migrating employees to the new plan will have a material adverse effect on our financial condition.

## ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

### Major Shareholders

Our capital stock is composed of common shares and preferred shares, all without par value. As of December 31, 2002, there were 634,168,418 outstanding common shares and 451,935,669 outstanding preferred shares as adjusted for the 1 for 100 reverse stock split approved by our board of directors on April 24, 2000 and effective as of May 23, 2000. Under the Brazilian Corporation Law, as amended, the number of non-voting shares of our company may not exceed two-thirds of the total number of shares. The Brazilian government is required by law to own at least a majority of our voting stock and currently owns 55.7% of our common shares, which are our only voting shares. The Brazilian government does not have any special voting rights.

The following table sets forth information concerning the ownership of our common shares and preferred shares as of April 30, 2003 by the Brazilian government, certain public sector entities and our officers and directors as a group. We are not aware of any other shareholder owning more than 5% of our common shares.

Shareholder	Common Shares	%	Preferred Shares	%	Total Shares	%
Brazilian government	353,314,557	55.7			353,314,557	32.2
BNDES Participações S.A. BNDESPAR	12,789,493	2.0	73,505,873	15.9	86,295,366	7.9
Other Brazilian public sector entities	947,141	0.1	329,520	0.1	1,276,661	0.1
All directors and executive officers as a Group (15 persons)	1,512	0.0	1,522	0.0	3,034	0.0
Others	267,115,715	42.2	387,965,582	84.0	655,084,297	59.8
<b>Total</b>	<b>634,168,418</b>	<b>100.0%</b>	<b>461,802,497</b>	<b>100.0%</b>	<b>1,095,970,915</b>	<b>100.0%</b>

In August 2000, the Brazilian government sold 180,609,768 of our common shares, reducing its percentage of ownership of our common shares from 84% to the current 55.7%. In July 2001, BNDES sold 41,381,826 of our preferred shares, which constituted its entire holdings of our shares.

The extraordinary shareholders meeting held together with the general shareholders meeting on March 27, 2003, approved an increase our capital by capitalizing revenue reserves accrued during previous years, amounting to U.S.\$912 million without issuing new shares, in accordance with Art. 169, paragraph 1 of Law No. 6404/76.

As of April 30, 2003, approximately 40.0% of our preferred shares and approximately 25.2% of our common shares were held of record in the United States. As of April 30, 2003, we had approximately 185,343,824 record holders of preferred shares, or American Depositary Shares representing preferred shares, and approximately 179,716,640 record holders of common shares, or American Depositary Shares representing common shares, in the United States.

### **Related Party Transactions**

#### *Board of Directors*

Direct transactions with interested members of our board of directors or our executive officers require the approval of our board of directors. None of the members of our board of directors, our executive officers or close members of their families has had any direct interest in any transaction we effected which is or was unusual in its nature or conditions or significant to our business during the current or the three immediately preceding financial years or during any earlier financial year which remains in any way outstanding or unperformed.

We have no outstanding loans or guarantees to the members of our board of directors, our executive officers or any close member of their families.

For a description of the shares beneficially held by the members of our board of directors and close members of their families, see Item 6 Directors, Senior Management and Employees Share Ownership.

#### *Brazilian Government and PETROS*

As of December 31, 2002, we had a receivable (the Petroleum and Alcohol Account) from the Brazilian government, our controlling shareholder, of U.S.\$182 million secured by U.S.\$46 million of National Treasury Bonds Series H issued by the Brazilian government. In addition, between 1991 and 1996 we received privatization currencies and securities from the Brazilian government as consideration for the sale of our shareholdings in certain subsidiaries and affiliates of Petroquisa and Petrofértil.

On September 11, 1997, the privatization currencies were exchanged for National Treasury Bonds Series P (Series P bonds) issued by the Brazilian government. Series P bonds are non-transferable, except with the consent of the Brazilian government.

On July 4, 2001, the Brazilian government created the National Treasury Bonds Series B (Series B bonds). The Series B bonds are freely transferable and indexed to the IPCA with the terms and interest rate defined by the Finance Ministry.

On December 28, 2001, we exchanged the Series P bonds held by us for Series B bonds issued by the Brazilian government. The exchange was accounted for at fair value of U.S.\$3,239 million, and we recorded a loss of U.S.\$1,099 million in the results of our operations for the year. At such time, in accordance with a contract signed between us and PETROS, we transferred the rights on a substantial portion of the Series B bonds to PETROS to increase pension assets.

PETROS and BNDESPAR, among other investors, have subscribed to shares and debentures issued by special purpose vehicles created as part of the Marlim and Nova Marlim project financings. BNDESPAR, among other investors, has subscribed to shares issued by a special purpose vehicle created as part of the Pargo, Carapeba, Garoupa and Cherne project financing. PETROS also invests in special purpose vehicles created in connection with the Albacora-PETROS and Termobahia Project financings.



At December 31, 2002, PETROS had lent us U.S.\$107 million in project financing loans for the development of the Albacora field.

#### ***BNDES***

In February 1998, we established an approximately U.S.\$380 million program for the issuance of Brazilian debentures to BNDES, bearing interest at the *Taxa de Juros de Longo Prazo*, or TJLP interest rate, the Brazilian government's long-term interest rate, plus a margin of 2.5%, due February 2015 and guaranteed by Petrobras Gás S.A. and secured by a pledge of assets of Gaspetro. On December 31, 2002, the balance of debentures issued was U.S. \$194.2 million.

BNDES, in its role as an economic development bank, is involved with us as a lender and/or co-investor in a number of projects, and will probably continue to be involved in the future.

Current activities of BNDES related to us include:

investing in the construction of our petrochemical plants;

providing financing for our shipbuilding activities;

providing natural gas and oil field development financing; and

providing financing for one or more thermoelectric power projects in which we are an investor.

#### **ITEM 8. FINANCIAL INFORMATION**

##### **Consolidated Statements and Other Financial Information**

See Item 18 Financial Statements and Index to Financial Statements.

##### **Legal Proceedings**

We are currently subject to numerous proceedings relating to civil, criminal, administrative, environmental, labor and tax claims, which involve a wide range of issues. Several individual disputes account for a significant part of the total amount of claims against us. Our audited consolidated financial statements only include provisions for probable and reasonably estimable losses and expenses we may incur in connection with pending litigation. As of December 31, 2002, the accruals for contingencies was U.S.\$50 million, which we believe to be sufficient to meet probable and reasonably probable losses in the event of unfavorable rulings relating to the legal proceedings in which we are a party, including the ones described in Item 4 Information on the Company Environmental Liabilities. See Note 14 to our audited consolidated financial statements.

Claims against Petrobras, the parent company, which as of December 31, 2002, corresponded to approximately 93% of the total amount of claims against us, have decreased and the amounts paid by us in respect of legal claims in each of the last five years have never exceeded U.S.\$27 million, having been consistently immaterial to our results of operations and financial condition. As of December 31, 2002, we estimated that the total amount of claims against us, excluding disputes involving non-monetary claims or claims not reasonably estimable in the current stage of the proceedings, was approximately U.S.\$7.2 billion.

On November 23, 1992, Porto Seguro, a minority shareholder of Petroquisa, brought a lawsuit against us in the State Court of Rio de Janeiro for alleged losses suffered by Petroquisa in connection with the sales of certain of its subsidiaries. On January 14, 1997 we were held liable to Petroquisa for damages in the amount of R\$9,062 million. We appealed this decision and, on February 11, 2003, by a majority vote, the State Court of Appeals of Rio de Janeiro accepted our appeal and dismissed the plaintiff's claim. We expect Porto Seguro to appeal this decision and, if Porto Seguro prevails on appeal, an additional amount equal to 5% of the award would be payable to Porto Seguro, as a minority shareholder premium, and an additional amount equal to 20% of the award would be payable to Porto Seguro's attorneys. However, because the award would be payable to Petroquisa and we own 99% of the total capital of Petroquisa, we would only be liable for approximately 25% of the judgment amount. We consider the risk of loss with respect to this claim to be remote.

On January 15, 1986, the Public Ministry of the State of São Paulo and the *União dos Defensores da Terra* (Union for Defense of the Earth), filed a public civil action against us and 23 other companies in the State Court of São Paulo for alleged damages caused by pollution. This lawsuit is entering the discovery phase. Although the plaintiffs alleged damages of U.S.\$89,500 in an initial pleading filed with the Court, the Public Ministry of the State of São Paulo has publicly stated that U.S.\$800 million will be ultimately required to remedy the alleged environmental damage. The Court refused to assert joint and several liability of the defendants, and we believe that it will be difficult to determine the environmental damage attributable to each defendant. Therefore, we consider the risk of any material loss with respect to this claim to be remote.

On May 28, 1981, Kallium Mineração S.A. brought an action against Petromisa, our former subsidiary, in the Federal Court of the State of Rio de Janeiro alleging damages of R\$1,044 million relating to the rescission of a contract to develop a potassium salt mine. On August 10, 1999, the trial judge dismissed most of the plaintiff's claims and ordered us to indemnify the plaintiff only with respect to the preliminary research expenses it had incurred. Both parties have appealed the decision. If Kallium prevails on appeal, we would be required to pay an additional amount of 10% of any judgment to cover attorneys' fees. We consider the risk of loss with respect to this claim to be remote.

On March 18, 1999, Itasul Indústria e Comércio de Pescados S.A. brought a civil suit against BR in the state court of Santa Catarina requesting indemnification for alleged losses incurred as a result of BR's reporting the plaintiff's payment default to the government credit agency. The plaintiff maintains that BR's actions prevented it from obtaining any financing to continue its business operations or to meet its contractual duties to third parties. The plaintiff claims losses in the amount of approximately R\$1,462 million. The trial court is currently questioning the amount of damages claimed by the plaintiff. BR believes that the likelihood that it will be held liable for the alleged damages is remote and that, even in the event that BR is held liable, any judgment would be significantly lower than the amount claimed. This lawsuit is currently in the discovery phase.

Several individuals have filed a lawsuit (an *ação popular*) against us, Repsol-YPF and the Brazilian government seeking to unwind the transaction pursuant to which we exchanged some of our operating assets in Brazil for some of YPF's operating assets in Argentina. The plaintiffs maintain that the assets exchanged were not properly valued and that, therefore, the transaction was not in our best interests. On September 5, 2002, the Fourth Chamber of the Brazilian Federal Court of Appeals for the Fourth Region granted an injunction to the plaintiffs. At the request of the Brazilian government, Justice Nilson Naves, Chief Justice of the Superior Court of Justice of Brazil, suspended the injunction, stressing that the transaction had already been approved by the Brazilian antitrust authorities, the ANP and the Brazilian Federal Audit Court. We consider the risk of loss with respect to this claim to be remote. For a description of the asset swap transaction, see Item 4 Information on the Company International Argentine Activities Repsol Asset Swap .

We are a defendant in seven labor lawsuits filed with three different state labor courts related to our alleged failure to index salaries in accordance with the official inflation rates published by the Brazilian government during the years 1987, 1989 and 1990. Labor unions in the States of Rio de Janeiro, São Paulo and Sergipe have alleged that the failure to apply this indexation to the salaries of certain employees reduced the income of the relevant employees and unjustly deprived them of amounts which would have accrued in relation to salaries earned during the relevant years. The lawsuits are each at different stages of the litigation process. Based upon our previous victories in similar actions and the position of the Brazilian Superior Court of Labor Law on the matter, we believe that the risk that any material judgment will be entered against us is remote.

Certain independent distributors located throughout Brazil have brought civil claims against us. Collectively, these claims total approximately R\$1,271 million and aim at the restitution of the *Imposto sobre Circulação de Mercadorias e Serviços* (state value-added tax, or ICMS) retained from such distributors and collected by us in favor of many states, plus damages. We believe these taxes were properly collected and represent valid state value-added tax credits. However, in connection with these claims, approximately R\$79 million in injunctive relief was declared against us in various local courts and seized from our accounts in several jurisdictions in anticipation of favorable judgments for the distributors. Upon appeal, these rulings were subsequently overruled, but to date only a small portion of that amount (approximately R\$4 million) has been returned to us. We consider the risk of loss with respect to these claims to be remote, but we cannot give assurance that we will be able to effectively recover the remaining portion of the aforementioned amount.

The tax authority of the State of São Paulo filed legal proceedings against us alleging that we improperly claimed certain credits relating to the collection of the ICMS on interstate sales of naphtha. The approximate aggregate amount of these claims is R\$212 million. We cannot give assurance that the final decision would be favorable to us, but even in the case we lose, we do not believe that an unfavorable ruling would have a material adverse effect on us.

We received several tax assessments from the INSS alleging irregular presentation of documentation by construction companies and other service providers under contract with us with regard to their INSS contributions. The INSS seeks to hold us jointly and severally liable for contributions not made by these providers, in accordance with paragraphs 5 and 6 of Article 219 and paragraphs 2 and 3 of Article 220 of Decree 3048/99. We are analyzing each of the INSS's assessments in order to attempt to recover payments that we made to the INSS with respect to these tax assessments. In addition, we intend to take action against service providers in order to recover any amounts paid and not recovered from the INSS. Because it is unlikely that we will successfully obtain a reversal of the INSS's decision through the agency's administrative procedures, we have established a U.S.\$105 million provision to cover future payments to the INSS.

In response to the INSS's assessments, we have revised our internal procedures to improve the inspection of contracts and to ensure that contractors are presenting proper documents evidencing the payment of INSS contributions, in accordance with applicable legislation. In connection with service contracts requiring the employment of substantial numbers of workers, we directly discount 11% of the invoiced value of such service contracts and pay this amount directly to the INSS. Additionally, in January 2003, we established automated procedures for verifying that service contractors comply with their INSS obligations and ensuring that no payment is made to service providers until we have verified such compliance.

We have been the defendant in a number of civil, administrative and criminal proceedings related to alleged violations of environmental laws and regulations, including lack of licenses required to operate our platforms in the Campos Basin, and environmental damages caused by significant oil spills. For a

description of existing environmental lawsuits, see Item 4 Information on the Company Environmental Liabilities.

We are currently involved, on behalf of the special purpose company involved in the Barracuda/Caratinga project financing, in negotiations with Halliburton Company and its subsidiary Kellogg Brown & Root, Inc., KBR, regarding certain claims relating to construction activities involved in the project. We have reached an agreement with Halliburton and KBR with respect to certain claims, subject to the project lenders approval, extending some construction milestones and increasing the costs related to the project. We have agreed with Halliburton and KBR to submit the remainder of the claims to arbitration in accordance with the terms of the project agreements. The total amount of the KBR claims against the project company is approximately U.S.\$375 million and the total amount of claims that we and the project company have against Halliburton and KBR, in addition to liquidated damages, is approximately U.S.\$380 million. An adverse determination with respect to either set of claims could adversely affect our operating results and financial condition.

On June 13, 2003, the governor of the State of Rio de Janeiro signed a bill into law that should increase the amount of ICMS that we are required to pay by approximately R\$5.4 billion. We intend to challenge the new law as an unconstitutional form of taxation. For a more detailed description of this matter, see Item 5 Operating and Financial Review and Prospects Effect of Taxes on our Income Change in ICMS Legislation .

For a description of the lawsuit relating to the migration of employees from PETROS to the new pension plan, see Item 6 Directors, Senior Management and Employees Employees and Labor Relations Our Pension Fund.

### Dividend Distribution

For our policy on mandatory dividend distribution see Item 10 Additional Information Memorandum and Articles of Incorporation Payment of Dividends and Interest on Shareholders Equity.

## ITEM 9. THE OFFER AND LISTING

### Trading Markets

Our shares and ADSs are listed or quoted on the following markets:

Common Shares	São Paulo Stock Exchange de Valores Latinoamericanos en Euros (LATIBEX) Madrid, Spain	São Paulo Mercado
Preferred Shares	São Paulo Stock Exchange de Valores Latinoamericanos en Euros (LATIBEX) Madrid, Spain	São Paulo Mercado
Common ADSs	New York Stock Exchange	New York
Preferred ADSs	New York Stock Exchange	New York

We are currently applying for listing of our shares on the Buenos Aires Stock Exchange.

### Price Information

The tables below set forth reported high and low closing sale prices in Reais per common and preferred share and the reported average daily trading volume in common and preferred shares on the São Paulo Stock Exchange for the periods indicated. The table also sets forth prices in U.S. dollars per common and preferred share at the commercial market rate for the purchase of U.S. dollars, as reported by the Central Bank of Brazil, for each of the dates of such quotations. See Item 3 Key Information Exchange Rates for information with respect to exchange rates applicable during the periods set forth below and for a description of the commercial market rate as compared to other rates.

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	Reais per		U.S. Dollars per		Average Number of Common Shares Traded per Day
	Common Share		Common Share		
	High	Low	High	Low	
<b>1997</b>	27.30	12.64	25.22	12.15	129,500
<b>1998</b>	23.50	5.60	20.60	4.75	78,800
<b>1999</b>	40.00	4.90	22.24	3.31	311,700
<b>2000</b>	60.39	33.40	33.21	18.60	484,900
<b>2001</b>	70.15	47.50	29.74	18.27	382,793

**2000:**

First Quarter	45.70	33.40	26.23	18.57	229,748
Second Quarter	52.98	35.40	29.33	19.12	218,924
Third Quarter	60.39	44.80	33.21	24.94	876,543
Fourth Quarter	57.70	47.42	30.77	24.23	571,600

**2001:**

First Quarter	59.40	49.61	29.02	25.56	449,267
Second Quarter	70.15	49.30	29.74	22.86	340,600
Third Quarter	60.80	49.75	24.93	18.29	329,700
Fourth Quarter	57.00	47.50	22.39	19.64	395,100

**2001:**

December	54.00	48.40	22.68	20.49	475,709
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**2002:**

First Quarter	63.12	48.40	26.93	19.88	358,976
Second Quarter	62.40	46.25	26.85	16.44	423,840
Third Quarter	53.65	39.60	18.45	10.29	473,869
Fourth Quarter	55.20	37.89	15.85	9.80	368,056

**2003:**

January	58.50	49.61	17.85	13.68	271,368
February	52.60	46.15	14.98	12.86	302,200
March	53.50	46.00	15.63	12.94	305,058
April	54.20	50.19	18.76	15.69	345,525
May	59.00	55.00	20.49	18.73	371,557

	Reais per		U.S. Dollar per		Average Number of Preferred Shares Traded per Day
	Preferred Share		Preferred Share		
	High	Low	High	Low	
<b>1997</b>	33.50	16.40	30.94	15.78	1,454,600
<b>1998</b>	29.50	9.80	25.88	8.31	1,895,800
<b>1999</b>	46.00	10.02	25.58	6.01	1,780,900
<b>2000</b>	57.70	40.00	31.73	22.34	1,196,700
<b>2001</b>	62.11	44.94	29.11	17.92	1,072,177

**2000:**

First Quarter	51.19	40.80	29.53	22.88	921,700
Second Quarter	54.50	40.00	30.22	22.34	1,071,400
Third Quarter	57.70	45.14	31.73	25.13	1,603,900

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Fourth Quarter	53.64	44.60	28.76	22.66	1,174,300
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**2001:**

First Quarter	57.91	46.90	29.11	21.65	1,113,266
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Second Quarter	62.11	44.94	26.33	20.66	933,400
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Third Quarter	58.00	49.00	22.69	17.92	1,067,200
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Fourth Quarter	55.01	45.80	22.10	18.10	1,206,400
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**2001:**

December	52.05	47.10	22.10	19.96	1,046,756
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	Reais per Preferred Share		U.S. Dollar per Preferred Share		Average Number of Preferred Shares Traded per Day
	High	Low	High	Low	
<b>2002:</b>					
First Quarter	60.30	46.97	25.73	19.33	961,775
Second Quarter	59.01	42.20	25.37	15.00	958,722
Third Quarter	48.11	35.99	16.79	9.36	1,255,722
Fourth Quarter	48.76	35.15	13.99	9.07	1,080,792
<b>2003:</b>					
January	52.70	44.65	16.13	12.27	1,230,432
February	48.08	41.65	13.69	11.61	1,015,550
March	48.07	41.61	14.16	11.70	1,135,995
April	49.89	45.80	17.27	14.30	1,129,010
May	54.50	50.70	18.89	17.13	1,244,610

The tables below set forth the reported high and low closing sale prices per common and preferred share and the reported average daily trading volume in common and preferred shares on the New York Stock Exchange for the periods indicated.

	Reais per Common Share		U.S. Dollar per Common Share		Average Number of Common Shares Traded per Day
	High	Low	High	Low	
<b>2001:</b>					
Fourth Quarter	57.48	47.57	23.30	18.70	597,123
<b>2001:</b>					
December	54.42	48.29	23.30	20.36	451,738
<b>2002:</b>					
First Quarter	63.58	48.69	27.10	20.00	410,825
Second Quarter	63.49	45.50	27.30	16.18	611,329
Third Quarter	53.20	38.46	18.09	10.00	857,971
Fourth Quarter	55.82	36.91	16.03	9.55	795,568
<b>2003:</b>					
January	58.49	49.65	17.94	13.70	1,254,562
February	52.70	46.35	15.01	12.94	907,289
March	54.29	46.21	15.82	13.00	1,084,862
April	54.19	49.52	18.55	15.43	1,307,500
May	58.41	53.44	20.15	18.36	1,116,705

	Reais per Preferred Share		U.S. Dollars per Preferred Share		Average Number of Preferred Shares Traded per Day
	High	Low	High	Low	
<b>2002:</b>					
March	60.81	55.76	25.95	23.79	484,335
Second Quarter	59.99	41.48	25.80	14.75	1,238,191
Third Quarter	48.26	34.81	16.72	9.05	1,274,823

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Fourth Quarter	50.66	34.40	14.55	8.90	1,343,018
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	Reais per		U.S. Dollars per		Average Number of Preferred Shares Traded per Day
	Preferred Share		Preferred Share		
	High	Low	High	Low	
<b>2003:</b>					
January	53.08	45.07	16.28	12.39	773,990
February	48.39	41.57	13.78	11.63	562,374
March	48.96	41.91	14.29	11.79	866,971
April	49.42	45.58	17.11	14.33	701,495
May	54.07	48.93	18.73	16.81	873,786

### Markets

In 2000, the Brazilian stock exchanges entered into memoranda of understanding to reorganize themselves. Pursuant to the memoranda, all securities are now traded only on the São Paulo Stock Exchange, with the exception of electronically traded public debt securities. Privatization auctions are conducted on the Rio de Janeiro Stock Exchange. In 2001, the São Paulo Stock Exchange accounted for 100% of the trading value of equity securities on all Brazilian stock exchanges.

If you were to trade in our common or preferred shares on the São Paulo Stock Exchange, your trade would settle in three business days after the trade without adjustment of the purchase price for inflation. The seller is ordinarily required to deliver the shares to the exchange on the second business day following the trade date. Delivery of and payment for shares are made through the facilities of the clearinghouse, or *Companhia Brasileira de Liquidação e Custódia*, known as CBLC.

The São Paulo Stock Exchange is a nonprofit entity owned by its member brokerage firms. Trading on each exchange is limited to member brokerage firms and a number of authorized nonmembers. The São Paulo Stock Exchange has two open outcry trading sessions each day from 11:00 a.m. to 1:30 p.m. and from 2:30 p.m. to 6:00 p.m. Brazil local time, except during daylight savings time in the United States. During daylight savings time in the United States, the sessions are from 10:00 a.m. to 1:00 p.m. and from 2:00 p.m. to 5:00 p.m. Brazil local time, to closely mirror New York Stock Exchange trading hours. Trading is also conducted between 11:00 a.m. and 6:00 p.m., or between 10:00 a.m. and 5:00 p.m. during daylight savings time in the United States on an automated system known as the *Sistema de Negociação Assistida por Computador* (Computer Assisted Trading System) on the São Paulo Stock Exchange. The São Paulo Stock Exchange also permits trading from 6:30 p.m. to 7:30 p.m. (or from 5:45 p.m. to 7:00 p.m. during daylight savings time in the United States) on an online system connected to traditional and internet brokers called the After Market. Trading on the After Market is subject to regulatory limits on price volatility and on the volume of shares transacted through internet brokers. There are no specialists or officially recognized market makers for our shares.

In order to better control volatility, the São Paulo Stock Exchange adopted a circuit breaker system pursuant to which trading sessions may be suspended for a period of thirty minutes or one hour whenever the indices of these stock exchanges fall below the limits of 10% or 15%, respectively, in relation to the index registered in the previous trading session.

The São Paulo Stock Exchange is less liquid than the New York Stock Exchange or other major exchanges in the world. As of April 30, 2002, the aggregate market capitalization of the 412 companies listed on the São Paulo Stock Exchange was approximately U.S.\$189.4 billion and the ten largest companies listed on the São Paulo Stock Exchange represented approximately 47.2% of the total market capitalization of all listed companies. All the outstanding shares of an exchange-listed company may trade on the São Paulo Stock Exchange, but in most cases, less than half of the listed shares are actually available for trading by the public. The remainder is held by small groups of controlling persons, by

governmental entities or by one principal shareholder. As of April 30, 2002, we accounted for 13.8% of the market capitalization of all listed companies on the São Paulo Stock Exchange.

Trading on the São Paulo Stock Exchange by a holder not deemed to be domiciled in Brazil for Brazilian tax and regulatory purposes (a non-Brazilian holder ) is subject to certain limitations under Brazilian foreign investment legislation. With limited exceptions, non-Brazilian holders may only trade on the São Paulo Stock Exchange in accordance with the requirements of Resolution No. 2,689 of January 26, 2000 of the National Monetary Council. Resolution No. 2,689 requires that securities held by non-Brazilian holders be maintained in the custody of, or in deposit accounts with, financial institutions duly authorized by the Central Bank of Brazil and the CVM. In addition, Resolution No. 2,689 requires non-Brazilian holders to restrict their securities trading to transactions on Brazilian stock exchanges or qualified over-the-counter markets. With limited exceptions, non-Brazilian holders may not transfer the ownership of investments made under Resolution No. 2,689 to other non-Brazilian holders through a private transaction. See Item 10 Additional Information Exchange Controls and Item 10 Additional Information Brazilian Tax Considerations Taxation of Gains for a description of certain tax benefits extended to non-Brazilian holders who qualify under Resolution No. 2,689.

#### *Regulation of the Brazilian Securities Markets*

The Brazilian securities markets are principally governed by Law No. 6,385 of December 7, 1976, and the Brazilian Corporation Law, each as amended and supplemented, and by regulations issued by the CVM, which has regulatory authority over the stock exchanges and securities markets generally, the National Monetary Council, and the Central Bank of Brazil, which has licensing authority over brokerage firms and regulates foreign investment and foreign exchange transactions. These laws and regulations, among others, provide for disclosure requirements applicable to issuers of traded securities, restrictions on insider trading and price manipulation and protection of minority shareholders. They also provide for licensing and oversight of brokerage firms and governance of the Brazilian stock exchanges. However, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets.

Under the Brazilian Corporation Law, a company is either public (*companhia aberta*), such as we are, or privately held (*companhia fechada*). All public companies, including us, are registered with the CVM and are subject to reporting requirements. A company registered with the CVM may have its securities traded on the Brazilian stock exchanges or in the Brazilian over-the-counter market. Our common shares are listed and traded on the São Paulo Stock Exchange and may also be traded privately, subject to some limitations.

To be listed on the São Paulo Stock Exchange, a company must apply for registration with the CVM and the São Paulo Stock Exchange.

We have the option to ask that trading in our securities on the São Paulo Stock Exchange be suspended in anticipation of a material announcement. Trading may also be suspended on the initiative of the São Paulo Stock Exchange or the CVM, among other reasons, based on or due to a belief that a company has provided inadequate information regarding a material event or has provided inadequate responses to the inquiries by the CVM or the São Paulo Stock Exchange.

The Brazilian over-the-counter market consists of direct trades between individuals in which a financial institution registered with the CVM serves as intermediary. No special application, other than registration with the CVM, is necessary for securities of a public company to be traded in this market. The CVM requires that it be given notice of all trades carried out in the Brazilian over-the-counter market by the intermediaries.

Trading on the São Paulo Stock Exchange by non-residents of Brazil is subject to limitations under Brazilian foreign investment and tax legislation. The Brazilian custodian for the common shares underlying the ADSs must, on behalf of the depositary for the ADSs, register with the Central Bank of Brazil to remit U.S. dollars abroad for payments of dividends, any other cash distributions or upon the disposition of the shares and sales proceeds. In the event that a holder of ADSs exchanges ADSs for common shares, the holder will be entitled to continue to rely on the custodian's registration for five business days after the exchange. Thereafter, the holder may not be able to obtain and remit U.S. dollars abroad upon the disposition of the common shares or distributions relating to the common shares, unless the holder obtains a new registration. See Item 10 Additional Information Exchange Controls.

## **ITEM 10. ADDITIONAL INFORMATION**

### **Memorandum and Articles of Incorporation**

#### *General*

We are a publicly traded company duly registered with the CVM under No. 951-2. Article 3 of our bylaws establishes our corporate purposes as research, prospecting, extraction, processing, trade and transportation of crude oil from wells, shale and other rocks, of its derivatives, natural gas and other fluid hydrocarbons, as well as other related or similar activities, such as activities connected with energy, including research, development, production, transportation, distribution, sale and trade of all forms of energy, as well as other related or similar activities. We may conduct outside Brazil, directly or through our subsidiaries, any of the activities within our corporate purpose.

#### *Qualification of Directors*

Brazilian law provides that only shareholders of a company may be appointed to its board of directors, but there is no minimum share ownership or residency requirement for qualification as a director. Members of our board of executive officers must be Brazilian nationals and resident in Brazil. Our directors and executive officers are prevented from voting on any transaction involving companies in which they hold more than 10% of the total capital stock or of which they have held a management position in the period immediately prior to their taking office.

#### *Allocation of Net Income*

At each annual general shareholders' meeting, our board of directors is required to recommend how net profits for the preceding fiscal year are to be allocated. The Brazilian Corporation Law defines net profits as net income after income taxes and social contribution taxes for such fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to employees' and management's participation in our profits. In accordance with the Brazilian Corporation Law, the amounts available for dividend distribution or payment of interest on shareholders' equity equals net profits less any amounts allocated from such net profits to the legal reserve.

We are required to maintain a legal reserve, to which we must allocate 5% of net profits for each fiscal year until the amount for such reserve equals 20% of our paid-in capital. However, we are not required to make any allocations to our legal reserve in a fiscal year in which the legal reserve, when added to our other established capital reserves, exceeds 30% of our capital. The legal reserve can only be used to offset losses or to increase our capital.

As long as we are able to make the minimum mandatory distribution described below, we must allocate an amount equivalent to 0.5% of subscribed and fully paid-in capital at year-end to a statutory

reserve. The reserve is used to fund the costs of research and technological development programs. The accumulated balance of this reserve cannot exceed 5% of the subscribed and fully paid-in capital stock.

Brazilian law also provides for three discretionary allocations of net profits that are subject to approval by the shareholders at the annual general shareholders' meeting, as follows:

first, a percentage of net profits may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the reasons justifying the reserve cease to exist, or written off in the event that the anticipated loss occurs;

second, if the mandatorily distributable amount exceeds the sum of realized net profits in a given year, this excess may be allocated to an unrealized revenue reserve. The Brazilian Corporation Law defines realized net profits as the amount of net profits that exceeds the net positive result of equity adjustments and profits or revenues from operations whose financial results take place after the end of the next succeeding fiscal year; and

third, a portion of our net profits that exceeds the minimum mandatory distribution may be allocated to fund working capital needs and investment projects, as long as such allocation is based on a capital budget previously approved by our shareholders. Capital budgets for more than one year must be revised at each annual shareholders' meeting.

#### *Mandatory Distribution*

The bylaws of a Brazilian corporation may specify a minimum percentage of the amounts available for distribution by such corporation for each fiscal year that must be distributed to shareholders as dividends or interest on shareholders' equity, also known as the mandatory distributable amount. Under our bylaws, the mandatory distributable amount has been fixed at an amount equal to not less than 25% of our net profits, after the allocations to the legal reserve, contingency reserve and unrealized revenue reserve. Furthermore, the net profits that are not allocated to the reserves above to fund working capital needs and investment projects as described above or to the statutory reserve must be distributed to our shareholders as dividends or interest on shareholders' equity.

The Brazilian Corporation Law, however, permits a publicly held company, such as us, to suspend the mandatory distribution if the board of directors and the audit committee report to the annual general shareholders' meeting that the distribution would be inadvisable in view of the company's financial condition. The suspension is subject to approval of holders of common shares. In this case, the board of directors must file a justification for such suspension with the CVM. Profits not distributed by virtue of the suspension mentioned above shall be allocated to a special reserve and, if not absorbed by subsequent losses, shall be distributed as soon as the financial condition of the company permits such payments.

#### *Payment of Dividends and Interest on Shareholders' Equity*

We are required by the Brazilian Corporation Law and by our bylaws to hold an annual general shareholders' meeting by the fourth month after the end of each fiscal year at which, among other things, the shareholders have to decide on the payment of an annual dividend. The payment of annual dividends is based on the financial statements prepared for the relevant fiscal year.

Law No. 9,249 of December 26, 1995, as amended, provides for distribution of interest attributed to shareholders' equity to shareholders as an alternative form of distribution. Such interest is limited to the daily *pro rata* variation of the TJLP interest rate, the Brazilian government's long-term interest rate.

We may treat these payments as a deductible expense for corporate income tax and social contribution purposes, but the deduction cannot exceed the greater of:

50% of net income (before taking into account such distribution and any deductions for income taxes and after taking into account any deductions for social contributions on net profits) for the period in respect of which the payment is made; or

50% of retained earnings.

Any payment of interest on shareholders' equity to holders of ADSs or common shares, whether or not they are Brazilian residents, is subject to Brazilian withholding tax at the rate of 15% or 25%. The 25% rate applies if the beneficiary is resident in a tax haven. See Brazilian Tax Considerations. The amount paid to shareholders as interest attributed to shareholders' equity, net of any withholding tax, may be included as part of any mandatory distribution of dividends.

Under the Brazilian Corporation Law and our bylaws, dividends generally are required to be paid within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. The amounts of dividends due our shareholders are subject to financial charges at the SELIC rate (an interest rate applicable to certain Brazilian government securities) from the end of each fiscal year through the date we actually pay such dividends. Shareholders have a three-year period from the dividend payment date to claim dividends or interest payments with respect to their shares, after which the amount of the unclaimed dividends reverts to us.

Our preferred shares are entitled to priority in the distribution of the greater of a 5% minimal dividend, calculated over the part of our capital stock represented by the preferred shares, or 3% of the share book value with a participation equal to the common shares in corporate capital increases obtained from the incorporation of reserves and profits.

Our board of directors may distribute dividends or pay interest based on the profits reported in interim financial statements. The amount of interim dividends distributed cannot exceed the amount of our capital reserves.

#### *Shareholders' Meetings*

Our shareholders have the power to decide on any matters related to our corporate purposes and to pass any resolutions they deem necessary for our protection and development, through voting at a general shareholders' meeting.

We convene our shareholders' meetings by publishing a notice in the *Diário Oficial da União* (Official Gazette), *Jornal do Commercio*, *Gazeta Mercantil* and *Valor Econômico*. The notice must be published no fewer than three times, beginning at least 15 calendar days prior to the scheduled meeting date. The notice must contain the meeting's agenda and, in the case of a proposed amendment to the bylaws, an indication of the subject matter. For ADS holders, we are required to provide notice to the ADS depository at least 30 calendar days prior to a shareholders' meeting.

The board of directors or, in some specific situations set forth in the Brazilian Corporation Law, the shareholders, call our general shareholders' meetings. A shareholder may be represented at a general shareholders' meeting by an attorney-in-fact so long as the attorney-in-fact was appointed within a year of the meeting. The attorney-in-fact must be a shareholder, a member of our management, a lawyer or a financial institution. The attorney-in-fact's Power of Attorney must comply with certain formalities set forth by Brazilian law.

In order for a valid action to be taken at a shareholders' meeting, shareholders representing at least one quarter of our issued and outstanding common shares must be present at the meeting. However, in the case of a general meeting to amend our bylaws, shareholders representing at least two-thirds of our issued and outstanding common shares must be present. If no such quorum is present, the board may call a second meeting giving at least eight calendar days notice prior to the scheduled meeting in accordance with the rules of publication described above. The quorum requirements will not apply to the second meeting, subject to the voting requirements for certain matters described below.

#### *Voting Rights*

Pursuant to the Brazilian Corporation Law and our bylaws, each of our common shares carries the right to vote at a general meeting of shareholders. Preferred shares generally do not confer voting rights, except as described below. We may not restrain or deny the voting rights without the consent of the majority of the shares affected.

Holders of common shares, voting at a general shareholders' meeting, have the exclusive power to:

amend our bylaws;

approve any capital increase beyond the amount of the authorized capital;

approve any capital reduction;

approve the appraisal of any assets used by a shareholder to subscribe for our shares;

elect or dismiss members of our board of directors and audit committee, subject to the right of our preferred shareholders to elect or dismiss one member of our board of directors and of our audit committee;

receive the yearly financial statements prepared by our management and accept or reject management's financial statements, including the allocation of net profits for payment of the mandatory dividend and allocation to the various reserve accounts;

authorize the issuance of debentures, except for the issuance of non-convertible unsecured debentures, which may be approved by our board of directors;

suspend the rights of a shareholder who has not fulfilled the obligations imposed by law or by our bylaws;

accept or reject the valuation of assets contributed by a shareholder in consideration for issuance of capital stock;

pass resolutions to approve corporate restructurings, such as mergers, spin-offs and transformation into another type of company;

participate in a centralized group of companies;

approve the disposal of the control of our subsidiaries;

approve the disposal of convertible debentures issued by our subsidiaries and held by us;

establish the compensation of our senior management;

approve the cancellation of our registration as a publicly-traded company;

decide on our dissolution or liquidation;

waive the right to subscribe to shares or convertible debentures issued by our subsidiaries or affiliates; and

choose a specialized company to work out the appraisal of our shares by economic value, in cases of the canceling of our registry as a publicly-traded company or deviation from the standard rules of corporate governance defined by a stock exchange or an entity in charge of maintaining an organized over-the-counter market registered with the *Comissão de Valores Mobiliários* (Brazilian Securities Commission, or the CVM), in order to comply with such corporate governance rules and with contracts that may be executed by us and such entities.

Except as otherwise provided by law, resolutions of a general shareholders meeting are passed by a simple majority vote by holders of our common shares. Abstentions are not taken into account.

The approval of holders of at least one-half of the issued and outstanding common shares is required for the following actions involving our company:

reduction of the mandatory dividend distribution;

merger into another company or consolidation with another company, subject to the conditions set forth in the Brazilian Corporation Law;

participation in a centralized group of companies as defined under the Brazilian Corporation Law and subject to the conditions set forth therein;

change of our corporate purpose;

cessation of the state of liquidation;

spin-off of a portion of our company, subject to the conditions set forth in the Brazilian Corporation Law;

transfer of all our shares to another company or receipt of shares of another company in order to make the company whose shares are transferred a wholly owned subsidiary of such company, known as *incorporação de ações*; and

approval of our liquidation.

According to the Brazilian Corporation Law, the approval of the holders of a majority of the outstanding adversely affected preferred shares at a special meeting, as well as shareholders representing at least one-half of the issued and outstanding common shares is required for the following actions:

creation of preferred shares or increase in the existing classes of preferred shares, without preserving the proportions to any other class of preferred shares, except as set forth in or authorized by the company's bylaws;

change in the preferences, privileges or redemption or amortization conditions of any class of preferred shares; and

creation of a new class of preferred shares entitled to more favorable conditions than the existing classes.

Decisions on our transformation into another type of company requires the unanimous approval of our shareholders, including the preferred shareholders.

Our preferred shares will acquire voting rights if we fail to pay the minimum dividend to which such shares are entitled for three consecutive fiscal years. The voting right shall continue until payment has been made. Preferred shareholders also obtain the right to vote if we enter into a liquidation process. Preferred shareholders that hold a minimum number of shares have the right to appoint one member to our board of directors and to our audit committee. Preferred shareholders are not entitled to vote on any other matter.

Under Brazilian Corporation Law, shareholders representing at least 10% of the company's voting capital have the right to demand that a cumulative voting procedure be adopted to entitle each common share to as many votes as there are board members and to give each common share the right to vote cumulatively for only one candidate or to distribute its votes among several candidates.

Furthermore, according to our bylaws, common shareholders have the right to appoint and/or dismiss one member to or from our board of directors. Minority common shareholders holding at least 10% of our voting capital also have the right to appoint or dismiss one member to or from our audit committee.

Preferred shareholders holding, individually or as a group, 10% of our total capital have the right to appoint and/or dismiss one member to or from our board of directors. Preferred shareholders have the right to separately appoint and/or dismiss one member to or from our audit committee.

Our bylaws provide that, independently from the exercise of the rights above granted to minority shareholders, through cumulative voting process, the Federal Government always has the right to appoint the majority of our directors.

#### *Preemptive Rights*

Pursuant to the Brazilian Corporation Law, each of our shareholders has a general preemptive right to subscribe for shares or securities convertible into shares in any capital increase, in proportion to the number of shares held by them. In the event of a capital increase that would maintain or increase the proportion of capital represented by the preferred shares, holders of preferred shares would have preemptive rights to subscribe to newly issued preferred shares only. In the event of a capital increase that would reduce the proportion of capital represented by the preferred shares, holders of preferred shares would have preemptive rights to subscribe to any new preferred shares in proportion to the number of shares held by them, and to common shares only to the extent necessary to prevent dilution of their interests in our total capital.

A period of at least 30 days following the publication of notice of the issuance of securities convertible into shares is allowed for exercise of the right, and the right is negotiable. According to our bylaws, our board of directors may eliminate preemptive rights or reduce the exercise period in connection with a public exchange made to acquire control of another company or in connection with a public offering of shares or securities convertible into shares.



In the event of a capital increase by means of the issuance of new shares, holders of ADSs, of common or preferred shares, would have, except under circumstances described above, preemptive rights to subscribe for any class of our newly issued shares. However, you may not be able to exercise the preemptive rights relating to the preferred shares underlying your ADSs unless a registration statement under the Securities Act is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. See Item 3 Key Information Risk Factors Risks Relating to our Equity and Debt Securities.

*Redemption and Rights of Withdrawal*

Brazilian law provides that, under limited circumstances, a shareholder has the right to withdraw his or her equity interest from the company and to receive payment for the portion of shareholder's equity attributable to his or her equity interest.

This right of withdrawal may be exercised by the holders of the adversely affected common or preferred shares in the event that we decide:

to create preferred shares or to increase the existing classes of preferred shares, without preserving the proportions to any other class of preferred shares, except as set forth in or authorized by our bylaws; or

to change the preferences, privileges or redemption or amortization conditions of any class of preferred shares or to create a new class of preferred shares entitled to more favorable conditions than the existing classes.

Holders of our common shares may exercise their right of withdrawal in the event we decide:

to merge into another company or to consolidate with another company, subject to the conditions set forth in the Brazilian Corporation Law; or

to participate in a centralized group of companies as defined under the Brazilian Corporation Law and subject to the conditions set forth therein.

The right of withdrawal may also be exercised by our dissenting shareholders in the event we decide:

to reduce the mandatory distribution of dividends;

to change our corporate purposes;

to spin-off a portion of our company, subject to the conditions set forth in the Brazilian Corporation Law;

to transfer all of our shares to another company or to receive shares of another company in order to make the company whose shares are transferred a wholly-owned subsidiary of our company, known as *incorporação de ações*; or

to acquire control of another company at a price which exceeds the limits set forth in the Brazilian Corporation Law, subject to the conditions set forth in the Brazilian Corporation Law.

This right of withdrawal may also be exercised in the event that the entity resulting from a merger, *incorporação de ações*, as described above, or consolidation or spin-off of a listed company fails to become a listed company within 120 days of the shareholders' meeting at which such decision was taken.

Any redemption of shares arising out of the exercise of such withdrawal rights would be made based on the book value per share, determined on the basis of the last balance sheet approved by our shareholders. However, if a shareholders' meeting giving rise to redemption rights occurred more than 60 days after the date of the last approved balance sheet, a shareholder would be entitled to demand that his or her shares be valued on the basis of a new balance sheet dated within 60 days of such shareholders' meeting. The right of withdrawal lapses 30 days after publication of the minutes of the shareholders' meeting that approved the corporate actions described above. We would be entitled to reconsider any action giving rise to withdrawal rights within ten days following the expiration of such rights if the withdrawal of shares of dissenting shareholders would jeopardize our financial stability.

#### *Other Shareholders' Rights*

According to the Brazilian Corporation Law, neither a company's bylaws nor actions taken at a general meeting of shareholders may deprive a shareholder of some specific rights, such as:

the right to participate in the distribution of profits;

the right to participate equally and ratably in any remaining residual assets in the event of liquidation of the company;

the right to supervise the management of the corporate business as specified in the Brazilian Corporation Law;

the right to preemptive rights in the event of a subscription of shares, debentures convertible into shares or subscription bonuses (other than with respect to a public offering of such securities, as may be set out in the bylaws); and

the right to withdraw from the company in the cases specified in the Brazilian Corporation Law.

#### *Liquidation*

In the event of a liquidation, holders of preferred shares are entitled to receive, prior to any distribution to holders of common shares, an amount equal to the paid-in capital with respect to the preferred shares.

#### *Conversion Rights*

According to our bylaws, our common shares are not convertible into preferred shares, nor are preferred shares convertible into common shares.

#### *Liability of Our Shareholders for Further Capital Calls*

Neither Brazilian law nor our bylaws provide for capital calls. Our shareholders' liability for capital calls is limited to the payment of the issue price of the shares subscribed or acquired.

*Form and Transfer*

Our shares are registered in book-entry form and we have hired Banco Itaú to perform all the services of safe-keeping and transfer of shares. To make the transfer, Banco Itaú makes an entry in the register, debits the share account of the transferor and credits the share account of the transferee.

Our shareholders may choose, at their individual discretion, to hold their shares through CBLC. Shares are added to the CBLC system through Brazilian institutions which have clearing accounts with the CBLC. Our shareholder registry indicates which shares are listed on the CBLC system. Each participating shareholder is in turn registered in a registry of beneficial shareholders maintained by the CBLC and is treated in the same manner as our registered shareholders.

*Dispute Resolution*

Our bylaws provide for mandatory dispute resolution through arbitration, in accordance with the rules of the *Câmara de Arbitragem do Mercado* (Market Arbitration Chamber), with respect to any dispute regarding us, our shareholders, the officers, directors and auditing committee members and involving the provisions of the Brazilian Corporation Law, our bylaws, the rules of the National Monetary Council, the Central Bank of Brazil and the CVM or any other capital markets legislation, including the provisions of any agreement entered into by us with any stock exchange or over-the-counter entity registered with the CVM, relating to adoption of differentiated corporate governance practices.

However, decisions of the Brazilian government, as exercised through voting in any general shareholders meeting, are not subject to this arbitration proceeding, in accordance with Article 238 of the Brazilian Corporation Law.

*Self-dealing Restrictions*

Our controlling shareholder, the Brazilian government, and the members of our board of directors, board of executive officers and audit committee are required, in accordance with our bylaws, to:

refrain from dealing with our securities either in the one-month period prior to any fiscal year-end, up to the date when our financials are published, or in the period between any corporate decision to raise or reduce our stock capital, to distribute dividends or stock, and to issue any security, up to the date when the respective public releases are published; and

communicate to us and to the stock exchange their periodical dealing plans with respect to our securities, if any, including any change or default in these plans. If the communication is an investment or divestment plan, the frequency and planned quantities must be included.

**Restrictions on Non-Brazilian Holders**

Non-Brazilian holders face no legal restrictions on the ownership of our common or preferred shares or of ADSs based on our common or preferred shares, and are entitled to all the rights and preferences of such common or preferred shares, as the case may be.

However, the ability to convert dividend payments and proceeds from the sale of common or preferred shares or preemptive rights into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, the registration of the relevant investment with the Central Bank of Brazil. Nonetheless, any non-Brazilian holder who registers with the CVM in accordance with Resolution No. 2,689 may buy and sell

securities on the São Paulo Stock Exchange without obtaining a separate certificate of registration for each transaction.

In addition, Annex V to Resolution No. 1,289 of the National Monetary Council, as amended, known as Annex V Regulations, allows Brazilian companies to issue depositary receipts in foreign exchange markets. We currently have an ADR program for our preferred shares duly registered with the CVM and the Central Bank of Brazil. The proceeds from the sale of ADSs by holders outside Brazil are free of Brazilian foreign investment controls.

### **Transfer of Control**

According to Brazilian law and our bylaws, the Brazilian government is required to own at least the majority of our voting shares. Therefore, any change in our control would require a change in the applicable legislation.

### **Disclosure of Shareholder Ownership**

Brazilian regulations require that any person or group of persons representing the same interest that has directly or indirectly acquired or sold an interest corresponding to 5% of the total number of shares of any type or class must disclose its share ownership or divestment to the CVM and the São Paulo Stock Exchange. In addition, a statement containing the required information must be published in the newspapers. Any subsequent increase or decrease by 5% or more in ownership of shares of any type or class must be similarly disclosed.

### **Material Contracts**

#### *Concession Agreements with the ANP*

As provided in the Oil Law, we were granted the exclusive right, for a period of 27 years from the declaration of commercial feasibility, to exploit the crude oil reserves in all fields where we had previously commenced production. Additionally, the Oil Law 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. To perfect our claim to explore and develop these areas, we had to demonstrate that we had the requisite financial capacity to carry out these activities, either alone or through cooperative arrangements.

On August 6, 1998, we signed concession contracts with the ANP relating to 397 areas, consisting of 231 production areas, 115 exploration areas and 51 development areas. In May 1999, we relinquished 26 exploratory areas out of the 115 initially granted to us by the ANP, and obtained an extension of our exclusive exploration period from three to five years with respect to 34 exploration areas aggregating 44.0 million acres (178,033 square kilometers) and from three to six years with respect to two exploration areas aggregating 7.3 million acres (29,415 square kilometers).

The concessions not awarded to us by the ANP have been, and will continue to be, awarded through public auctions conducted by the ANP. In the four auctions conducted thus far, we acquired interests in 37 exploration areas. See Item 4 Information on the Company Exploration, Development and Production Exploration Activities Exploration Bidding Rounds.

Under our concession agreements with the ANP we are required to pay the Brazilian government the following:

signature bonuses;

royalties;

special participation taxes; and

rentals for the occupation or retention of areas.

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 has to be paid upon the execution of the concession agreement. The rentals for the occupation and retention of the concession areas are also provided for in the related bidding rules and are payable annually. For a discussion of royalties, special participation tax and rentals, see Item 5 Operating and Financial Review and Prospects Effect of Taxes on our Income .

With respect to onshore fields, the Oil Law also requires us 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.

#### *Natural Gas Purchase and Sale Agreement*

Pursuant to a 1996 commercial contract for the purchase of natural gas between us and the Bolivian state oil company, Yacimientos Petroliferos Fiscales Bolivianos, we are required to purchase from YPF on a take-or-pay basis specified quantities of natural gas transported through the Bolivia-Brazil pipeline over a 20-year term. We also have a transportation capacity option valid for a 40-year term. The transportation capacity option was granted to us in exchange for our investment of approximately U.S.\$379 million in the Bolivia-Brazil pipeline.

#### **Exchange Controls**

There are no restrictions on ownership of the common or preferred shares by individuals or legal entities domiciled outside Brazil.

The right to convert dividend payments and proceeds from the sale of shares into foreign currency and to remit such amounts outside Brazil may be subject to restrictions under foreign investment legislation which generally requires, among other things, that the relevant investments be registered with the Central Bank of Brazil. If any restrictions are imposed on the remittance of foreign capital abroad, they could hinder or prevent CBLC, as custodian for the common and preferred shares represented by the American Depositary Shares, or registered holders who have exchanged American Depositary Shares for common shares or preferred shares, from converting dividends, distributions or the proceeds from any sale of such common shares or preferred shares, as the case may be, into U.S. dollars and remitting the U.S. dollars abroad.

Foreign investors may register their investment under Law No. 4,131 of September 3, 1962 or Resolution No. 2,689. Registration under Resolution No. 2,689 affords favorable tax treatment to foreign investors who are not resident in a tax haven, as defined by Brazilian tax laws. See Brazilian Tax Considerations.

Under Resolution No. 2,689, foreign investors may invest in almost all financial assets and engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with Resolution No. 2,689, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Under Resolution No. 2,689, a foreign investor must:

appoint at least one representative in Brazil, with powers to perform actions relating to its investment;

appoint an authorized custodian in Brazil for its investments;

register as a foreign investor with the CVM; and

register its foreign investment with the Central Bank of Brazil.

Securities and other financial assets held by a Resolution No. 2,689 investor must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank of Brazil or the CVM. In addition, any transfer of securities held under Resolution No. 2,689 must be carried out in the stock exchanges or through organized over-the-counter markets licensed by the CVM, except for transfers resulting from a corporate reorganization or occurring upon the death of an investor by operation of law or will.

Holders of American Depositary Shares who have not registered their investment with the Central Bank of Brazil could be adversely affected by delays in, or refusals to grant, any required government approval for conversions of payments made in Reais and remittances abroad of these converted amounts.

Annex V Regulations provide for the issuance of depositary receipts in foreign markets with respect to shares of Brazilian issuers. The depositary of the ADSs has obtained from the Central Bank of Brazil an electronic certificate of registration with respect to our existing ADR program. Pursuant to the registration, the custodian and the depositary will be able to convert dividends and other distributions with respect to the relevant shares represented by ADSs into foreign currency and to remit the proceeds outside Brazil. Following the closing of an international offering, the electronic certificate of registration will be amended by the depositary with respect to the ADSs sold in the international offering and will be maintained by the Brazilian custodian for the relevant shares on behalf of the depositary.

In the event that a holder of ADSs exchanges such ADSs for the underlying shares, the holder will be entitled to continue to rely on such electronic registration for five business days after the exchange. Thereafter, unless the relevant shares are held pursuant to Resolution No. 2,689 by a duly registered investor, or a holder of the relevant shares applies for and obtains a new certificate of registration from the Central Bank of Brazil, the holder may not be able to convert into foreign currency and to remit outside Brazil the proceeds from the disposition of, or distributions with respect to, the relevant shares, and the holder, if not registered under Resolution No. 2,689, will be subject to less favorable Brazilian tax treatment than a holder of ADSs. In addition, if the foreign investor resides in a tax haven jurisdiction, the investor will be also subject to less favorable tax treatment. See Item 3 Key Information Risk Factors Risks Relating to our Equity and Debt Securities and Brazilian Tax Considerations.

## Taxation

The following summary contains a description of certain Brazilian and U.S. federal income tax consequences of the purchase, ownership and disposition of preferred or common shares or ADSs by a holder.

The summary is based upon the tax laws of Brazil and the United States as in effect on the date of this annual report, which are subject to change (possibly with retroactive effect). This summary is also based upon the representations of the depository and on the assumption that the obligations in the deposit agreement and any related documents will be performed in accordance with their respective terms.

This description is not a comprehensive description of all of the tax considerations that may be relevant to any particular investor, including tax considerations that arise from rules of general application to all taxpayers or to certain classes of investors or that are generally assumed to be known by investors. **Prospective purchasers of common or preferred shares or ADSs should consult their own tax advisors as to the tax consequences of the acquisition, ownership and disposition of common or preferred shares or ADSs.**

There is at present no income tax treaty between Brazil and the United States. In recent years, the tax authorities of the two countries have held discussions that may culminate in such a treaty. We cannot predict, however, whether or when a treaty will enter into force or how it will affect the U.S. holders of common or preferred shares or ADSs.

### Brazilian Tax Considerations

#### *General*

The following discussion summarizes the material Brazilian tax consequences of the acquisition, ownership and disposition of preferred or common shares or ADSs, as the case may be, by a holder that is not domiciled in Brazil, also called a non-Brazilian holder, for purposes of Brazilian taxation and, in the case of a holder of preferred or common shares, which has registered its investment in preferred or common shares at the Central Bank of Brazil as a U.S. dollar investment.

Under Brazilian law, investors may invest in the preferred or common shares under Resolution No. 2,689 or under Law No. 4,131 of September 3, 1962. Investments under Resolution No. 2,689 afford favorable tax treatment to foreign investors who are not resident in a tax haven jurisdiction. The rules of Resolution No. 2,689 allow foreign investors to invest in almost all instruments and to engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are met. In accordance with Resolution No. 2,689, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Pursuant to this rule, foreign investors must: (1) appoint at least one representative in Brazil with powers to perform actions relating to the foreign investment; (2) complete the appropriate foreign investor registration form; (3) register as a foreign investor with the CVM; and (4) register the foreign investment with the Central Bank of Brazil.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 2,689 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank of Brazil or the CVM. In addition, securities trading is restricted to transactions carried out in the stock exchanges or organized over-the-counter markets licensed by the CVM.

*Taxation of Dividends*

Dividends paid by us, including stock dividends and other dividends paid in property to the depositary in respect of the ADSs, or to a non-Brazilian holder in respect of the preferred or common shares, are currently not subject to withholding tax in Brazil.

We must pay to our shareholders (including holders of common or preferred shares or ADSs) interest on the amount of dividends payable to them, at the SELIC rate (the interest rate applicable to certain Brazilian government bonds traded in the Brazilian market), from the end of each fiscal year through the date of effective payment of those dividends. These interest payments are considered as fixed-yield income and are subject to withholding income tax at a 20% rate. However, holders of ADSs and holders of common or preferred shares not resident or domiciled in tax haven jurisdictions (see *Beneficiaries Residing or Domiciled in Tax Havens or Low Tax Jurisdictions*) investing under Resolution No. 2,689 are subject to such withholding tax at a reduced rate, currently at 15%.

*Taxation on Interest on Shareholders' Equity*

Any payment of interest on shareholders' equity (see *Memorandum and Articles of Incorporation - Payment of Dividends and Interest on Shareholders' Equity*) to holders of ADSs or preferred or common shares, whether or not they are Brazilian residents, is subject to Brazilian withholding income tax at the rate of 15% at the time we record such liability, whether or not the effective payment is made at that time. In the case of non-Brazilian residents that are resident in a tax haven jurisdiction, the applicable withholding income tax rate is 25% (see *Beneficiaries Residing or Domiciled in Tax Havens or Low Tax Jurisdictions*). The payment of additional amounts relating to interest at the SELIC rate applies equally to payments of interest on shareholders' equity. The determination of whether or not we will make distributions in the form of interest on shareholders' equity or in the form of dividends is made by our board of directors at the time distributions are to be made. We cannot determine how our board of directors will make these determinations in connection with future distributions.

*Taxation of Gains*

For purposes of Brazilian taxation, there are two types of non-Brazilian holders of ADSs or preferred or common shares: (1) non-Brazilian holders that are not resident or domiciled in a tax haven jurisdiction (see *Beneficiaries Residing or Domiciled in Tax Havens or Low Tax Jurisdictions*), and that, in the case of holders of preferred or common shares, are registered before the Central Bank of Brazil and the CVM to invest in Brazil in accordance with Resolution No. 2,689; and (2) other non-Brazilian holders, which include any and all non-residents of Brazil who invest in equity securities of Brazilian companies through any other means (including under Law No. 4,131 of 1962) and all types of investors that are located in tax haven jurisdictions. The investors identified in clause (1) above are subject to favorable tax treatment in Brazil, as described below.

Gains realized outside Brazil by a non-Brazilian holder on the disposition of ADSs to another non-Brazilian holder are not subject to Brazilian tax.

The deposit of preferred or common shares in exchange for ADSs may be subject to Brazilian capital gains at the rate of 15% if the amount previously registered with the Central Bank of Brazil as a foreign investment in the preferred or common shares is lower than:

(1) the average price per preferred or common share on a Brazilian stock exchange on which the greatest number of such shares were sold on the day of deposit; or



(2) if no preferred or common shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of preferred or common shares were sold in the 15 trading sessions immediately preceding such deposit. In such a case, the difference between the amount previously registered and the average price of the preferred or common shares calculated as above, will be considered a capital gain. Investors registered under Resolution No. 2,689 and not located in a tax haven jurisdiction are exempt from this type of taxation. The withdrawal of ADSs in exchange for preferred or common shares is not subject to Brazilian tax. On receipt of the underlying preferred or common shares, the non-Brazilian holder registered under Resolution No. 2,689 will be entitled to register the U.S. dollar value of such shares with the Central Bank of Brazil as described below in Registered Capital.

Non-Brazilian holders are not subject to tax in Brazil on gains realized on sales of preferred or common shares that occur abroad to non-Brazilian holders.

Non-Brazilian holders which are not located in a tax haven jurisdiction are subject to income tax imposed at a rate of 15% on gains realized on sales or exchanges of the preferred or common shares that occur in Brazil or with a resident of Brazil, other than in connection with transactions on the Brazilian stock, future or commodities exchanges. With respect to proceeds of a redemption or of a liquidating distribution with respect to the preferred or common shares, the difference between the amount effectively received by the shareholder and the amount of foreign currency registered with the Central Bank of Brazil, accounted for in Reais at the commercial market rate on the date of the redemption or liquidating distribution, will be also subject to income tax at a rate of 15% given that such transactions are treated as a sale or exchange not carried out on the Brazilian stock, future and commodities exchanges.

Gains realized arising from transactions on the Brazilian stock, future or commodities exchanges by an investor registered under Resolution No. 2,689 who is not located in a tax haven jurisdiction are exempt from Brazilian income tax. Otherwise, gains realized on transactions related to the Brazilian stock, future or commodities exchanges are subject to income tax at a rate of 20%.

Therefore, non-Brazilian holders are subject to income tax imposed at a rate of 20% on gains realized on sales or exchanges of preferred or common shares that occur on the stock exchange unless such a sale is made by a non-Brazilian holder who is not resident in a tax haven jurisdiction and:

- (1) such sale is made within five business days of the withdrawal of such preferred or common shares in exchange for ADSs and the proceeds thereof are remitted abroad within such five-day period; or
- (2) such sale is made under Resolution No. 2,689 by registered non-Brazilian holders who obtain registration with the CVM.

In these two cases, the transaction will not be subject to taxation in Brazil. The gain realized is for tax purposes the difference between the amount in Reais realized on the sale or exchange and the acquisition cost measured in Reais, without any adjustment to account for inflation of the shares sold. The gain realized as a result of a transaction that occurs other than on the stock exchange will be the positive difference between the amount realized on the sale or exchange and the acquisition cost of the preferred or common shares, both such values to be taken into account in Reais. There are reasonable grounds, however, to hold that the gain realized should be calculated based on the foreign currency amount registered with the Central Bank of Brazil, such foreign currency amount to be translated into Reais at the commercial market rate on the date of such sale or exchange.

Any exercise of preemptive rights relating to the preferred or common shares will not be subject to Brazilian taxation. Any gain on the sale or assignment of preemptive rights relating to the preferred or common shares by the depositary on behalf of holders of the ADSs will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of preferred or common shares,

unless such sale or assignment is performed on the stock exchange by an investor under Resolution No. 2,689 who is not resident in a tax haven jurisdiction, in which case the gains are exempt from income tax.

There is no assurance that the current preferential treatment for holders of the ADSs and some non-Brazilian holders of the preferred or common shares under Resolution No. 2,689 will continue in the future.

*Taxation of Foreign Exchange Transactions ( IOF/Câmbio )*

Under Decree No. 2,219 of May 2, 1997, the conversion into Brazilian currency of proceeds received by a Brazilian entity from a foreign investment in the Brazilian securities market (including those in connection with an investment in preferred or common shares or the ADSs and those under Resolution No. 2, 689) and the conversion into foreign currency of proceeds received by a non-Brazilian holder is subject to a tax on exchange transactions known as IOF/Câmbio, which is currently applicable at a zero percent rate in most transactions. However, according to Law No. 8,894 of June 21, 1994, the IOF/Câmbio rate may be increased at any time to a maximum of 25% by a decision of the Minister of Finance, but only in relation to exchange transactions carried out after the increase of the applicable rate.

*Taxation on Bonds and Securities Transactions ( IOF/Títulos )*

Law No. 8,894 created the Tax on Bonds and Securities Transactions, or IOF/Títulos, which may be imposed on any transactions involving bonds and securities carried out in Brazil, even if these transactions are performed on the Brazilian stock, futures or commodities exchange. As a general rule, the rate of this tax is currently zero but the Federal Government may increase such rate up to 1.5% per day, but only in relation to transactions carried out after the increase of the applicable rate.

*Other Brazilian Taxes*

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of preferred or common shares or ADSs by a non-Brazilian holder, except for gift and inheritance taxes which are levied by some states of Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil to individuals or entities resident or domiciled within such states in Brazil. There are no Brazilian stamp, issue, registration, or similar taxes or duties payable by holders of preferred or common shares or ADSs.

*Transactions on Bank Accounts ( CPMF )*

As a general rule, the *Contribuição Provisória sobre Movimentação Financeira* (Tax on Transactions on Bank Accounts, or CPMF), is imposed on any debit to bank accounts. Therefore, transactions by the depositary or by holders of preferred or common shares which involve the transfer of Brazilian currency through Brazilian financial institutions will be subject to the CPMF tax. These transactions include situations where a non-Brazilian holder transfers the proceeds from the sale or assignment of preferred or common shares by an exchange transaction, in which case the CPMF tax will be levied on the amount to be remitted abroad in Reais. If we have to perform any exchange transaction in connection with ADSs or preferred or common shares, we will also be subject to the CPMF tax. The CPMF tax is imposed generally on bank account debits at the current rate of 0.38%, which will be applicable through December 31, 2003. During 2004, the CPMF tax rate will be 0.08%. The CPMF is set to expire on December 31, 2004. However, the President of Brazil has proposed a bill to the Brazilian Congress which, if approved, will convert the CPMF tax into a permanent tax. The financial institution that carries out the relevant financial transaction is responsible for collecting the applicable CPMF tax.

*Beneficiaries Resident or Domiciled in Tax Havens or Low Tax Jurisdictions*

Law No. 9,779 of January 1, 1999 states that, except for limited prescribed circumstances, income derived from transactions by a beneficiary, resident or domiciliary of a country considered a tax haven is subject to withholding income tax at the rate of 25%. Tax havens are considered to be countries which do not impose any income tax or which impose such tax at a maximum rate of less than 20%. Accordingly, if the distribution of interest attributed to shareholders' equity is made to a beneficiary resident or domiciled in a tax haven jurisdiction, the applicable income tax rate will be 25% instead of 15%. Capital gains are not subject to this 25% tax, even if the beneficiary is resident in a tax haven jurisdiction. See Taxation of Gains.

**Registered Capital**

The amount of an investment in preferred or common shares held by a non-Brazilian holder who obtains registration under Resolution No. 2,689, or by the depositary representing such holder, is eligible for registration with the Central Bank of Brazil; such registration (the amount so registered being called registered capital) allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized with respect to dispositions of, such preferred or common shares. The registered capital for each preferred or common share purchased as part of the international offering or purchased in Brazil after the date hereof, and deposited with the depositary will be equal to its purchase price (in U.S. dollars). The registered capital for a preferred or common share that is withdrawn upon surrender of an ADS will be the U.S. dollar equivalent of:

the average price of a preferred or common share on the Brazilian stock exchange on which the greatest number of such shares were sold on the day of withdrawal; or

if no preferred or common shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of preferred or common shares were sold in the 15 trading sessions immediately preceding such withdrawal.

The U.S. dollar value of the average price of preferred or common shares is determined on the basis of the average of the U.S. dollar/Real commercial market rates quoted by the Central Bank of Brazil information system on that date (or, if the average price of preferred or common shares is determined under the second option above, the average of such average quoted rates on the same 15 dates used to determine the average price of preferred or common shares).

A non-Brazilian holder of preferred or common shares may experience delays in effecting such registration, which may delay remittances abroad. Such a delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder. See Item 3 Key Information Risk Factors Risks Relating to our Equity and Debt Securities.

**U.S. Federal Income Tax Considerations**

The statements regarding U.S. tax law set forth below are based on U.S. law as in force on the date of this annual report, and changes to such law subsequent to the date of this annual report may affect the tax consequences described herein. This summary describes the principal tax consequences of the ownership and disposition of common or preferred shares or ADSs, but it does not purport to be a comprehensive description of all of the tax consequences that may be relevant to a decision to hold or dispose of common or preferred shares or ADSs. This summary applies only to purchasers of common or preferred shares or ADSs who will hold the common or preferred shares or ADSs as capital assets and does not apply to special classes of holders such as dealers in securities or currencies, holders whose

functional currency is not the U.S. dollar, holders of 10% or more of our shares (taking into account shares held directly or through depository arrangements), tax-exempt organizations, financial institutions, holders liable for the alternative minimum tax, securities traders who elect to account for their investment in common or preferred shares or ADSs on a mark-to-market basis, and persons holding common or preferred shares or ADSs in a hedging transaction or as part of a straddle or conversion transaction.

**Each holder should consult such holder's own tax advisor concerning the overall tax consequences to it, including the consequences under laws other than U.S. federal income tax laws, of an investment in common or preferred shares or ADSs.**

In this discussion, references to ADSs also refer to common or preferred shares, and references to a U.S. holder are to a holder of an ADS that:

is a citizen or resident of the United States of America,

is a corporation organized under the laws of the United States of America or any state thereof; or

is otherwise subject to U.S. federal income taxation on a net basis with respect to the ADS.

For purposes of the U.S. Internal Revenue Code of 1986, as amended, (the Code) holders of ADSs will be treated as owners of the common or preferred shares represented by such ADSs.

#### *Taxation of Distributions*

A U.S. holder will recognize ordinary dividend income for U.S. federal income tax purposes in an amount equal to the amount of any cash and the value of any property we distribute as a dividend to the extent that such distribution is paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes, when such distribution is received by the custodian, or by the U.S. holder in the case of a holder of common or preferred shares. The amount of any distribution will include the amount of Brazilian tax withheld on the amount distributed, and the amount of a distribution paid in Reais will be measured by reference to the exchange rate for converting Reais into U.S. dollars in effect on the date the distribution is received by the custodian, or by a U.S. holder in the case of a holder of common or preferred shares. If the custodian, or U.S. holder in the case of a holder of common or preferred shares, does not convert such Reais into U.S. dollars on the date it receives them, it is possible that the U.S. holder will recognize foreign currency loss or gain, which would be ordinary loss or gain, when the Reais are converted into U.S. dollars. Dividends paid by us will not be eligible for the dividends received deduction allowed to corporations under the Code. Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by an individual in respect of the ADSs after December 31, 2002 and before January 1, 2009 is subject to taxation at a maximum rate of 15%. You should consult your own tax adviser regarding the availability of the reduced dividend tax rate in the light of your own particular circumstances.

Distributions out of earnings and profits with respect to the ADSs generally will be treated as dividend income from sources outside of the United States and generally will be treated separately along with other items of passive (or, in the case of certain U.S. holders, financial services) income for purposes of determining the credit for foreign income taxes allowed under the Code. Subject to certain limitations, Brazilian income tax withheld in connection with any distribution with respect to the ADSs may be claimed as a credit against the U.S. federal income tax liability of a U.S. holder if such U.S. holder elects for that year to credit all foreign income taxes. Alternatively, such Brazilian withholding tax may be taken as a deduction against taxable income. Foreign tax credits may not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions in securities or in respect

of arrangements in which a U.S. holder's expected economic profit is insubstantial. U.S. holders should consult their own tax advisors concerning the implications of these rules in light of their particular circumstances.

Distributions of additional shares to holders with respect to their ADSs that are made as part of a pro rata distribution to all our shareholders generally will not be subject to U.S. federal income tax.

Holders of ADSs that are foreign corporations or nonresident alien individuals ( non-U.S. holders ) generally will not be subject to U.S. federal income tax or withholding tax on distributions with respect to ADSs that are treated as dividend income for U.S. federal income tax purposes unless such dividends are effectively connected with the conduct by the holder of a trade or business in the United States.

#### *Taxation of Capital Gains*

Upon the sale or other disposition of an ADS, a U.S. holder will generally recognize gain or loss for U.S. federal income tax purposes. The amount of the gain or loss will be equal to the difference between the amount realized in consideration for the disposition of the ADS and the U.S. holder's tax basis in the ADS. Such gain or loss generally will be subject to U.S. federal income tax and will be treated as capital gain or loss. The net amount of long-term capital gain recognized by an individual holder after May 5, 2003 and before January 1, 2009 generally is subject to taxation at a maximum rate of 15%. The net long-term capital gain recognized by an individual holder before May 6, 2003 generally is subject to taxation at a maximum rate of 20%. Capital losses may be deducted from taxable income, subject to certain limitations.

A non-U.S. holder will not be subject to U.S. federal income tax or withholding tax on gain realized on the sale or other disposition of an ADS unless:

such gain is effectively connected with the conduct by the holder of a trade or business in the United States; or

such holder is an individual who is present in the United States of America for 183 days or more in the taxable year of the sale and certain other conditions are met.

#### *Backup Withholding and Information Reporting*

Dividends paid on, and proceeds from the sale or other disposition of, the ADSs or common or preferred shares to a U.S. holder generally may be subject to the information reporting requirements of the Code and may be subject to backup withholding unless the U.S. holder provides an accurate taxpayer identification number or otherwise establishes an exemption. The amount of any backup withholding collected from a payment to a U.S. holder will be allowed as a credit against the U.S. holder's U.S. federal income tax liability and may entitle the U.S. holder to a refund, provided that certain required information is furnished to the Internal Revenue Service.

A non-U.S. holder generally will be exempt from these information reporting requirements and backup withholding tax, but may be required to comply with certain certification and identification procedures in order to establish its eligibility for such exemption.

#### **Documents on Display**

Statements contained in this annual report regarding the contents of any contract or other document are not necessarily complete, and, where the contract or other document is an exhibit to the

annual report, each of these statements is qualified in all respects by the provisions of the actual contract or other documents.

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, applicable to a foreign private issuer, and accordingly, we file or furnish reports, information statements and other information with the SEC. These reports and other information filed by us can be inspected at, and subject to the payment of any required fees, copies may be obtained from, the public Reference Section of the SEC, 450 Fifth Street, N.W., room 1024, Washington, D.C. 20549. As a foreign private issuer, we were not required to make filings with the SEC by electronic means prior to November 4, 2002, although we were permitted to do so. Any filings we make electronically will be available to the public over the internet at the SEC's website at <http://www.sec.gov>.

Reports and other information may also be inspected and copied at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005. As a foreign private issuer, however, we are exempt from the proxy requirements of Section 14 of the Exchange Act and from the short-swing profit recovery rules of Section 16 of the Exchange Act, although the rules of the New York Stock Exchange may require us to solicit proxies from our shareholders under some circumstances.

Our website is located at <http://www.petrobras.com.br>. The information on our website is not part of this annual report.

## **ITEM 11. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK**

### **General**

We are exposed to a number of market risks arising from our normal business activities. Such market risks principally involve the possibility that changes in commodity prices, currency exchange rates or interest rates will adversely affect the value of our financial assets and liabilities or future cash flows and earnings.

Although we currently produce approximately 90% of our crude oil requirements in Brazil, we import a substantial amount of crude oil, as well as smaller quantities of diesel, liquefied petroleum gas, naphtha and other oil products. We also export crude oil, bunker fuel, fuel oil and gasoline. Virtually all of the prices for these imports and exports are payable in U.S. dollars even though substantially all our revenues are collected in Reais (despite the fact these prices are partly based on international prices). In addition, a substantial portion of our indebtedness and some of our operating expenses are, and we expect them to continue to be, denominated in or indexed to U.S. dollars or other foreign currencies. See Item 4 Information on the Company Regulation of The Oil and Gas Industry in Brazil for the manner in which the Brazilian government has controlled the prices we charge.

The principal market for our products is Brazil and substantially all of our revenues are denominated in Reais. We have described above under Item 4 Information on the Company Regulation of The Oil and Gas Industry in Brazil Price Regulation the manner in which the Brazilian government has regulated the prices we charge.

### **Risk Management**

Our management of risk exposures is evolving under the policies of our executive officers, acting as a group, most of whom have been in office since February 2003. As described below, we enter into contracts, such as energy futures, forwards, puts, swaps and options, designed to hedge against the risk of price changes relating to our imports and exports. Such derivative commodity instruments are used only

to offset market exposures resulting from these imports and exports, and are not used for trading purposes. Our risk management activities follow transaction limits set by our executive officers as a group. The results of our derivative activities are reviewed by senior management from time to time to permit the goals and strategies of the program to be periodically adjusted in response to market conditions. See Note 11 to our audited consolidated financial statements.

We manage risk related to interest rate changes, currency exchange rate changes and commodity price changes based on Value at Risk or VAR measures. VAR is a measure of the maximum potential change in the value of financial instruments and commodity positions and projected cash flows with a given probability over a set horizon, generally one month. The VAR approach we apply is the Analytical Method or Variance/Covariance Method, which assumes that the distribution of returns from assets and liabilities are normal. The model uses historical volatility and correlation data to predict how markets are likely to move in the future and is based on the premise that the total market risk of a financial position is a function of two factors: volatilities and correlations. To the extent that price movements of assets and liabilities are not perfectly correlated, there will be a diversification effect. The total market risk of the position will be less than the direct summation of individual components. The VAR measure can differ from actual results because financial return distribution curves reflect the possibility of extreme price movements, while normal distribution curves may not reflect the true frequency of such price fluctuations.

### Commodity Price Risk

Our commodity risk management activities primarily consist of futures contracts, options and swaps. For the year ended December 31, 2002, we carried out derivative transactions on 42% of our total trade volume, as compared to 21.2% of our total trade volume for the year ended December 31, 2001 and 14.4% of our total trade volume for the year ended December 31, 2000. This increase in our derivative transactions is a result of normal fluctuations in our operations.

International hedging activities in 2002 represented an average of 379,000 barrels of oil equivalent per day of physical movements, of which 43.5% was related to fuel oil, 28.0% was related to diesel, 13.3% was related to gasoline and 7.3% was related to crude oil, as compared to our international hedging activities in 2001 which represented an average of 173,000 barrels of oil equivalent per day of physical movements, of which 36.0% was related to fuel oil, 31.0% was related to gasoline, 15.0% was related to diesel and 15.5% was related to crude oil. This increase in our international derivative transactions was a result of normal fluctuations in our operations.

Derivative transactions are generally entered into for short periods, usually not longer than six months. During 2002, our principal derivative transactions were as follows, and represented the following percentage of our total hedging operations coverage of barrels of oil equivalent for 2002:

	%	Average
		(Mbbbl)
Exchange of Futures for Physical (EFP)	18.2	25,222
Fixing Price of Imports	28.5	40,054
Fixing Price of Exports	49.3	69,271

The notional value of the contracts approximates fair value at December 31, 2002.

### Interest Rate and Exchange Rate Risk

The interest rate risk to which we are exposed is a function of our long-term debt and, to a lesser extent, our short-term debt. Our long-term debt consists principally of notes and borrowings incurred

primarily in connection with capital expenditures and investments in exploration and development projects and loans to affiliated companies. Approximately 87% of our long-term debt is denominated in currencies other than Reais, principally U.S. dollars, and to a lesser extent, Japanese Yen and euro-linked European currencies. Our short-term debt consists principally of U.S. dollar denominated import and export financing and working capital borrowings from commercial banks. In general, our foreign currency floating rate debt is principally subject to fluctuations in LIBOR. Our floating rate debt denominated in Reais is principally subject to fluctuations in the *Taxa de Juros de Longo Prazo* (Brazilian long-term interest rate, or TJLP), as fixed by the National Monetary Council. See Note 11 to our audited consolidated financial statements.

The exchange rate risk to which we are exposed is limited to the balance sheet and derives principally from the incidence of non-Real denominated obligations in our debt portfolio. In the event of a devaluation of the Real against the foreign currency in which our debt is denominated, we will incur a monetary loss with respect to such debt. However, a considerable part of our operating revenue is linked to the U.S. dollar since our oil product prices are based on international prices, while some expenses are not. See Item 5 Operating and Financial Review and Prospects - General.

The table below provides summary information regarding our exposure to interest rate and exchange rate risk in our total debt portfolio for the years ended December 31, 2002 and 2001:

	<b>Total Debt Portfolio</b>	
	<b>2002</b>	<b>2001</b>
Real denominated (all floating rate)	11.5%	13.8%
Dollar denominated	78.2	77.3
o/w fixed rate	34.7	33.5
o/w floating rate (includes short-term debt)	43.5	43.8
Other currencies (primarily Yen)	8.3	8.9
o/w fixed rate	6.9	7.3
o/w floating rate	1.4	1.6
Total	100.0%	100.0%

The table below provides information about our debt obligations as of December 31, 2002, which are sensitive to changes in interest rates and exchange rates. This table presents, by expected maturity dates and currency, the principal cash flows and related average interest rates of these obligations. Variable interest rates are based on the applicable reference rate, LIBOR, TJLP, IGP-M, CDI (*Certificado de Depósito Interbancário*, or Interbank Deposit Certificate) as of December 31, 2002:



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	2003	2004	2005	2006	2007	2008-2030	Total	Fair Value as of December 31, 2002
(in millions of U.S. dollars, except for percentages)								
<b>Debt in British Pounds:</b>								
Variable rate debt	\$ 1.13	\$ 1.03	\$	\$	\$	\$	\$ 2.16	\$ 2.16
Average interest rate	9.75%	9.75%						
<b>Debt in EURO:</b>								
Fixed rate debt	\$ 1.80	\$ 90.07	\$ 1.92	\$ 1.99	\$ 131.44	\$ 0.66	\$ 227.88	\$ 227.88
Average interest rate	4.80%	6.96%	4.86%	4.89%	6.99%	5.83%		
Variable rate debt	\$ 28.70	\$ 26.74	\$ 25.86	\$ 24.19	\$ 20.61	\$ 31.25	\$ 157.35	\$ 157.35
Average interest rate	8.65%	8.13%	7.76%	7.59%	7.58%	7.72%		
<b>Debt in Japanese Yen:</b>								
Fixed rate debt	\$ 344.19	\$ 90.63	\$ 93.19	\$ 79.44	\$ 71.03	\$ 101.14	\$ 779.62	\$ 779.62
Average interest rate	7.12%	7.45%	7.44%	6.50%	5.58%	6.75%		
Variable rate debt	\$ 1.73	\$ 1.77	\$ 1.82	\$ 1.89	\$ 1.96	\$ 33.00	\$ 42.17	\$ 42.17
Average interest rate	9.28%	9.28%	9.28%	9.28%	9.28%	9.28%		
<b>Debt in U.S. Dollars:</b>								
Fixed rate debt	\$ 797.98	\$ 376.24	\$ 224.51	\$ 664.01	\$ 1,037.37	\$ 2,220.76	\$ 5,320.87	\$ 5,196.69
Average interest rate	5.76%	7.65%	9.14%	9.01%	8.10%	9.44%		
Variable rate debt	\$ 673.42	\$ 826.22	\$ 855.77	\$ 927.23	\$ 699.14	\$ 2,478.12	\$ 6,459.90	\$ 6,459.90
Average interest rate	6.73%	6.47%	6.38%	6.85%	6.31%	6.49%		
<b>Debt in Brazilian Reais:</b>								
Variable rate debt	\$ 137.35	\$ 147.53	\$ 434.07	\$ 161.74	\$ 99.84	\$ 709.58	\$ 1,690.11	\$ 1,690.11
Average interest rate	25.03%	24.39%	24.70%	24.45%	25.14%	23.62%		
Total debt obligations	\$ 1,986.30	\$ 1,560.23	\$ 1,637.14	\$ 1,860.49	\$ 2,061.39	\$ 5,574.51	\$ 14,680.06	\$ 14,555.88

In 2000, we entered into three zero-cost foreign exchange collars, combined put and call options, which are treated as non-hedge derivative instruments relative to long-term debt denominated in foreign currencies to reduce our exposure to variations between the U.S. dollar and the Japanese Yen exchange rate, and between the U.S. dollar and euro exchange rate. These collars establish a ceiling and a floor for the associated exchange rates. If the exchange rate falls below the defined floor, the counterparty will pay to us the difference between the actual rate and the floor rate on the notional amount. Conversely, if the exchange rate increases above the defined ceiling, we will pay to the counterparty the difference between the actual rate and the ceiling rate on the notional amount.

The table below provides information about our zero-cost foreign exchange collars by contract. The table presents the notional amount of the related debt obligation, the floor and ceiling rates, the fair values of the put and call options and the expiration date of each contract.

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	<u>Japanese Yen</u>	<u>Austrian Schilling</u>	<u>Italian Lira</u>
Notional amount of debt (U.S.\$ in millions)	\$ 252.5	\$ 95.3	\$ 140.9
Contractual rates <sup>(1)</sup>			
Interest payments			
Floor	85.00	0.9400	0.9400
Ceiling	103.00	1.1800	1.1800
Final principal payments			
Floor	75.00	0.9525	1.0725
Ceiling	92.66	1.1800	1.1800
Fair value as of December 31, 2002 (U.S.\$ in millions)			
Put option	\$ (69.7)	\$ (2.8)	\$ (15.6)
Call option		\$ 1.6	\$ 6.1
Expiration date	2003	2004	2007

- (1) Contractual rates are presented as the Yen to U.S. dollar for the Japanese Yen contract and as the U.S. dollar to Euro for the Austrian Schilling and Italian Lira contracts, as specified in the contract.

## **Inflation**

The inflation rate in Brazil has declined significantly in recent years. Average monthly inflation, as measured by the IGP, was 43.2% during the first half of 1994 and the monthly rate of inflation reached 46.6% in June 1994. During the second half of 1994, the average monthly rate of inflation declined to 2.7%. The average monthly rate of inflation continually declined until 1998, reaching 5.9% in 1994, 1.2% in 1995, 0.8% in 1996, 0.6% in 1997 and 0.1% in 1998. The average monthly rate of inflation rose to 1.5% in 1999, declined to 0.8% in 2000, and rose to 0.83% in 2001. During 2002, the average monthly rate of inflation increased to 2.0%. The annual inflation rate for 1998 was 1.7%, versus 7.5% in 1997, 9.3% in 1996, 14.8% in 1995 and 909.6% in 1994. However, the annual inflation rate rose to 20.0% in 1999 and was 9.8% in 2000, 10.4% in 2001, and 26.4% in 2002.

## **ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not Applicable.

## **ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

None.

## **ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

None.

## **ITEM 15. CONTROLS AND PROCEDURES**

Within the 90 days prior to the date of this report, we carried out an evaluation under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon and as of the date of our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported as and when required.

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation.

## **ITEM 16. [RESERVED]**

## **ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

## **ITEM 18. FINANCIAL STATEMENTS**

See pages F-2 through F-103, incorporated herein by reference.

## ITEM 19. EXHIBITS

No.	Description
1.1	Amended By-Laws of Petróleo Brasileiro S.A. Petrobras (together with an English version) (incorporated by reference to Exhibit 1(a) of Petrobras annual report on Form 20-F for the fiscal year ended December 31, 2001 filed with the Securities and Exchange Commission on July 2, 2002 (File No. 1-15106)).
2.1	Deposit Agreement dated as of July 14, 2000, among Petrobras and Citibank, N.A., as depositary, and registered holders and beneficial owners from time to time of the American depositary shares, representing the common shares of Petrobras (incorporated by reference to exhibit of Petrobras Registration Statement on Form F-6 filed with the Securities and Exchange Commission on July 17, 2000 (File No. 333-123000)).
2.2	Amended and Restated Deposit Agreement dated as of February 21, 2001, among Petrobras and Citibank, N.A., as depositary, and the registered holders and beneficial owners from time to time of the American depositary shares, representing the preferred shares of Petrobras (incorporated by reference to exhibit 4.1 of Amendment No. 1 to Petrobras Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 3, 2001 (File No. 333-13660)).
2.3	Amendment No. 1, dated as of March 23, 2001, to the Amended and Restated Deposit Agreement, dated as of February 21, 2001, among Petrobras, Citibank N.A., as depositary, and the registered holders and beneficial owners from time to time of the American depositary shares representing the preferred shares of Petrobras (incorporated by reference to Exhibit 4.2 of Amendment No. 1 to Petrobras Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 3, 2001 (File No. 333-13660)).
2.4	Indenture, dated as of July 19, 2002, between Petrobras and JPMorgan Chase Bank, as Trustee (incorporated by reference to exhibit 4.4 of the Registration Statement of Petrobras International Finance Company and Petrobras on Form F-3, filed with the Securities and Exchange Commission on July 5, 2002, and amendments to which were filed on July 19, 2002 and August 14, 2002 (File No. 333-92044-01)).
2.5	Indenture, dated as of July 19, 2002, between Petrobras International Finance Company and JPMorgan Chase Bank, as Trustee (incorporated by reference to exhibit 4.5 of the Registration Statement of Petrobras International Finance Company and Petrobras on Form F-3, filed with the Securities and Exchange Commission on July 5, 2002, and amendments to which were filed on July 19, 2002 and August 14, 2002 (File No. 333-92044-01)).
2.6	First Supplemental Indenture, dated as of March 31, 2003, between Petrobras International Finance Company (PIFCo) and JPMorgan Chase Bank, as Trustee, relating to the 9.00% Global Step-Up Notes due 2008.
4.1	Form of Concession Agreement for Exploration, Development and Production of crude oil and natural gas executed between Petrobras and ANP (incorporated by reference to Exhibit 10.1 of Petrobras Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 14, 2000 (File No. 333-12298)).

No.	Description
4.2	Purchase and Sale Agreement of natural gas, executed between Petrobras and Yacimientos Petroliferos Fiscales Bolivianos YPFB (together with and English version) (incorporated by reference to Exhibit 10.2 to Petrobras Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 14, 2000 (File No. 333-12298)).
8.1	List of subsidiaries, their jurisdiction of incorporation and names under which they do business.
10.1	Consent letter of DeGolyer and MacNaughton.
10.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

**GLOSSARY OF PETROLEUM INDUSTRY TERMS**

Unless the context indicates otherwise, the following terms have the meanings shown below:

barrels or bbls	Barrels of crude oil.
catalytic cracking	A process by which hydrocarbon molecules are broken down (cracked) into lighter fractions by the action of a catalyst.
condensate	Light hydrocarbon substances produced with natural gas which condense into liquid at normal temperatures and pressures associated with surface production equipment.
crude oil	Crude oil, including NGLs.
distillation	A process by which liquids are separated or refined by vaporization followed by condensation.
heavy crude oil	Crude oil with API density less than or equal to 27°.
light crude oil	Crude oil with API density higher than 27°.
LPG	Liquefied petroleum gas, which is a mixture of saturated and unsaturated hydrocarbons, with up to five carbon atoms, used as domestic fuel.
NGLs	Natural gas liquids, which are light hydrocarbon substances produced with natural gas which condense into liquid at normal temperatures and pressures.
Proved reserves	Proved oil and gas reserves are the estimated quantities of crude oil, natural gas and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, i.e., prices and costs as of the date the estimate is made. Prices include consideration of changes in existing prices provided only by contractual arrangements, but not on escalations based upon future conditions.
Proved developed reserves	Proved developed reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods. Additional oil and gas expected to be obtained through the application of fluid injection or other improved recovery techniques for supplementing the natural forces and mechanisms of primary recovery are included as proved developed reserves only after testing by a pilot project or after the operation of an installed program has confirmed through production response that increased recovery will be achieved.

Proved undeveloped reserves

Proved undeveloped reserves are reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion, but does not include reserves attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual tests in the area and in the same reservoir. Reserves on undrilled acreage are limited to those drilling units offsetting productive units that are reasonably certain of production when drilled. Proved reserves for other undrilled units are claimed only where it is demonstrated with certainty that there is continuity of production from the existing productive formation.

**ABBREVIATIONS**

Bbl	Barrel
Bcf	Billion cubic feet
Boe	Barrels of oil equivalent
Bpd	Barrels per day
Cf	Cubic feet
Km	Kilometer
Km <sup>2</sup>	Square kilometers
Mbbl	Thousand barrels
Mboe	Thousand barrels of oil equivalent
Mbpd	Thousand barrels per day
Mcf	Thousand cubic feet
MMbbl	Million barrels
MMboe	Million barrels of oil equivalent
MMcf	Million cubic feet
MMcmd	Million cubic meters per day
MMcfd	Million cubic feet per day
MMscfd	Million standard cubic feet per day
m <sup>3</sup>	Cubic meters



**CONVERSION TABLE**

1 barrel	=	42 U.S. gallons	
1 domestic barrel of oil equivalent	=	1 barrel of crude oil	= 5,614.4 cubic feet of natural gas through December 31, 1999 and 6,000 cubic feet of natural gas as of December 31, 2000.
1 international barrel of oil equivalent	=	1 barrel of crude oil	= 6,000.0 cubic feet of natural gas
1 cubic meter of natural gas	=	35.314 cubic feet	= 0.0063 barrels of oil equivalent
1 Km	=	0.625 miles	
1 Km <sup>2</sup>	=	247.1 acres	
1 ton of crude oil	=	1 metric ton (1,000 kilograms of crude oil)	= Approximately 7.5 barrels of crude oil (assuming an atmospheric pressure index gravity of 37° API)
1 meter	=	3.2808 feet	

**SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant, Petróleo Brasileiro S.A. PETROBRAS, hereby certifies that it meets all the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rio de Janeiro, on June 18, 2003.

Petróleo Brasileiro S.A. PETROBRAS

By: /s/ JOSÉ EDUARDO DE BARROS DUTRA

---

Name: José Eduardo De Barros Dutra  
Title: Chief Executive Officer

By: /s/ JOSÉ SÉRGIO GABRIELLI DE AZEVEDO

---

Name: José Sérgio Gabrielli de Azevedo  
Title: Chief Financial Officer

---

**CERTIFICATION PURSUANT TO RULES 13a-15 and 15d-15 AS ADOPTED UNDER  
SECTION 302 OF THE SARBANES-OXLEY ACT**

I, José Eduardo de Barros Dutra, certify that:

1. I have reviewed this annual report on Form 20-F of Petróleo Brasileiro S.A. - PETROBRAS.
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - (a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - (c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 19, 2003

/s/ JOSÉ EDUARDO DEBARROS DUTRA

José Eduardo de Barros Dutra  
Chief Executive Officer

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**CERTIFICATION PURSUANT TO RULES 13a-15 and 15d-15 AS ADOPTED UNDER  
SECTION 302 OF THE SARBANES-OXLEY ACT**

I, José Sérgio Gabrielli de Azevedo, certify that:

1. I have reviewed this annual report on Form 20-F of Petróleo Brasileiro S.A. - PETROBRAS.
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - (a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - (c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 19, 2003

/s/ JOSÉ SÉRGIO GABRIELLI DE AZEVEDO

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José Sérgio Gabrielli de Azevedo  
Chief Financial Officer

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**PETRÓLEO BRASILEIRO**  
**S.A. - PETROBRAS and Subsidiaries**  
**Consolidated Financial Statements**  
**at December 31, 2002 and 2001**  
**and Report of Independent Accountants**

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**Report of Independent Accountants**

To the Board of Directors and Stockholders  
PETRÓLEO BRASILEIRO S.A. - PETROBRAS

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of cash flows and of stockholders' equity, present fairly, in all material respects, the financial position of PETRÓLEO BRASILEIRO S.A. - PETROBRAS and its subsidiaries at December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Notes 2(j) and 10, PETROBRAS has been subject to significant Brazilian Federal Government regulation and new regulations were implemented in July 1998 that significantly changed the regulation of the Brazilian oil and gas market.

PricewaterhouseCoopers  
Auditores Independentes  
Rio de Janeiro, Brazil

February 13, 2003.

**COPY OF THE ORIGINAL**

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**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Balance Sheets  
(Expressed in Millions of United States Dollars)**

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
<b>Assets</b>		
<b>Current assets</b>		
Cash and cash equivalents	3,301	7,360
Accounts receivable, net	2,267	2,759
Inventories	2,540	2,399
Deferred income tax	135	149
Recoverable taxes	672	664
Advances to suppliers	794	483
Other current assets	488	512
	<u>10,197</u>	<u>14,326</u>
<b>Property, plant and equipment, net</b>	<u>18,224</u>	<u>19,179</u>
<b>Investments in non-consolidated companies and other investments</b>	<u>334</u>	<u>499</u>
<b>Other assets</b>		
Accounts receivable, net	188	212
Advances to suppliers	450	403
Petroleum and Alcohol Account - Receivable from Federal Government	182	81
Government securities	176	665
Marketable securities	208	212
Unrecognized pension obligation	61	187
Restricted deposits for legal proceedings and guarantees	290	337
Receivables from non-consolidated companies	181	264
Recoverable taxes	128	164
Investment in Perez Companc S.A. (Note 16 (c))	1,073	
Other assets	326	335
	<u>3,263</u>	<u>2,860</u>
<b>Total assets</b>	<u><u>32,018</u></u>	<u><u>36,864</u></u>



**PETRÓLEO BRASILEIRO S.A. -****PETROBRAS and Subsidiaries****Consolidated Balance Sheets**

Expressed in Millions of United States Dollars, except number of shares

(continued)

	As of December 31	
	2002	2001
Liabilities and stockholders' equity		
<b>Current liabilities</b>		
Trade accounts payable	1,702	1,783
Income taxes	119	1,695
Taxes payable, other than income tax	1,682	450
Short-term debt	671	1,101
Current portion of long-term debt	727	940
Current portion of project financings	239	680
Capital lease obligations	349	298
Employee postretirement benefits	89	117
Payroll and related charges	283	333
Dividends payable	307	93
Accrued interest	120	104
Other payables and accruals	657	450
	<u>6,945</u>	<u>8,044</u>
<b>Long-term liabilities</b>		
Employees postretirement benefits	2,423	3,380
Project financings	3,800	3,153
Long-term debt	6,987	5,908
Capital lease obligations	1,907	1,930
Deferred income taxes	123	717
Contingencies	368	100
Other liabilities	300	306
	<u>15,908</u>	<u>15,494</u>
<b>Minority interest</b>	(136)	79
<b>Commitments and contingencies (Note 18)</b>		
<b>Stockholders' equity</b>		
Shares authorized and issued (Note 15(ii))		
Preferred stock - 2002 and 2001 - 451,935,669 shares	2,459	1,882
Common stock - 2002 and 2001 - 634,168,418 shares	3,761	2,952
Capital reserve	89	128
Accumulated other comprehensive income		
Cumulative translation adjustments	(17,306)	(11,854)
Amounts not recognized as net periodic pension cost	(1,361)	(1,867)
Unrealized gains (losses) on available-for-sale securities	(11)	13
Retained earnings		
Appropriated	5,585	6,869
Unappropriated	16,085	15,124
	<u>9,301</u>	<u>13,247</u>

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<b>Total liabilities and stockholders' equity</b>	<b>32,018</b>	<b>36,864</b>
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The accompanying notes are integral part of these consolidated financial statements.

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**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Income**

Expressed in millions of United States dollars, except number of shares and per-share amounts

	Years ended December 31		
	2002	2001	2000
<b>Sales of products and services</b>	32,987	34,145	35,496
Less:			
Value-added and other taxes on sales and services	(5,241)	(8,627)	(8,829)
Contribution for the Intervention in an Economic Domain CIDE (note 10 (a))	(5,134)		
Specific parcel price - PPE (Note 2(j))		(969)	288
<b>Net operating revenues</b>	<u>22,612</u>	<u>24,549</u>	<u>26,955</u>
Cost of sales (net of impact of government regulation of US\$ (68) and US\$19 in 2001 and 2000, respectively (Note 2(j)))	11,506	12,807	13,449
Depreciation, depletion and amortization	1,930	1,729	2,022
Exploration, including exploratory dry holes	435	404	440
Impairment of oil and gas properties	75	145	37
Selling, general and administrative expenses (net of impact of government regulation of US\$ (45) and US\$ (81) In 2001 and 2000, respectively (Note 2(j)))	1,741	1,751	1,450
Research and development expenses	147	132	152
<b>Total costs and expenses</b>	<u>15,834</u>	<u>16,968</u>	<u>17,550</u>

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Income**

Expressed in millions of United States dollars, except number of shares and per-share amounts

(continued)

	Years ended December 31		
	2002	2001	2000
Equity in results of non-consolidated companies	(178)	(8)	26
Financial income (including financial income on the Petroleum and Alcohol Account of Financial income (including financial income on the Petroleum and Alcohol Account of US\$ 2, US\$16 and US\$35 in 2002, 2001 and 2000 respectively (Note 2 (j)))	1,142	1,375	1,113
Financial expense	(774)	(808)	(909)
Monetary and exchange variation on monetary assets and liabilities, net	(2,068)	(915)	(575)
Employee benefit expense	(451)	(594)	(370)
Other taxes	(360)	(295)	(245)
Loss on government securities (Note 5)		(1,099)	(192)
Other expenses, net	(857)	(445)	(450)
	<u>(3,546)</u>	<u>(2,789)</u>	<u>(1,602)</u>
Income before income taxes and minority interest	<u>3,232</u>	<u>4,792</u>	<u>7,803</u>
<b>Income tax expense</b>			
Current	(1,269)	(1,196)	(1,574)
Deferred	116	(193)	(949)
	<u>(1,153)</u>	<u>(1,389)</u>	<u>(2,523)</u>
Minority interests in net losses of consolidated subsidiaries	<u>232</u>	<u>88</u>	<u>62</u>
<b>Net income for the year</b>	<u><b>2,311</b></u>	<u><b>3,491</b></u>	<u><b>5,342</b></u>
<b>Net income applicable to each class of shares</b>			
Common/ADS	1,349	2,038	3,119
Preferred/ADS	962	1,453	2,223
	<u>2,311</u>	<u>3,491</u>	<u>5,342</u>
<b>Basic and diluted earnings per share (Note 15 (ii))</b>			
Common/ADS and Preferred/ADS	2.13	3.21	4.92

<b>Weighted average number of shares outstanding (Note 15 (ii)) (ii)</b>			
Common/ADS	634,168,418	634,168,418	634,168,418
Preferred/ADS	451,935,669	451,935,669	451,935,669

The accompanying notes are an integral part of these consolidated financial statements.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Balance Sheets  
(Expressed in Millions of United States Dollars)**

	Years ended December 31		
	2002	2001	2000
<b>Cash flows from operating activities</b>			
Net income for the year	2,311	3,491	5,342
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation, depletion and amortization	1,951	1,731	2,043
Dry hole costs	198	194	277
Loss on property, plant and equipment	99	811	7
Loss on government securities		1,099	192
Deferred income taxes	(116)	193	949
Equity in results of non-consolidated companies	178	8	(26)
Impairment of oil and gas properties	75	145	37
Provision for uncollectible accounts	56	421	33
Minority interest in losses of consolidated subsidiaries	(232)	(88)	(62)
Foreign exchange and monetary loss	2,714	807	432
Gain on exchange of businesses with Repsol-YPF		(500)	
Others	2	(93)	
Decrease (increase) in assets			
Accounts receivable, net	(541)	(102)	(1,067)
Petroleum and Alcohol Account	(157)	1,173	(286)
Interest receivable on government securities	(10)	(243)	(280)
Inventories	(1,139)	232	(1,048)
Advances to suppliers	(797)	(240)	(212)
Prepaid expenses	(31)	(206)	(39)
Recoverable taxes	(190)	(422)	(149)
Others	(266)	(47)	(43)
Increase (decrease) in liabilities			
Trade accounts payable	669	(64)	865
Payroll and related charges	95	84	(10)
Taxes payable, other than income taxes	441	212	542
Employee post-retirement benefits, net of unrecognized pension obligation	177	(61)	253
Hedge activities	68	123	24
Accrued interest	158	58	(13)
Contingencies	365	37	(23)
Other liabilities	209	(10)	(24)
Net cash provided by operating activities	<u>6,287</u>	<u>8,743</u>	<u>7,714</u>

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Cash Flows  
Expressed in Millions of United States Dollars**

(continued)

	Years ended December 31		
	2002	2001	2000
<b>Cash flows from investing activities</b>			
Additions to property, plant and equipment	(4,911)	(4,254)	(3,583)
Investment in Perez Compan S.A.	(1,073)		
Investments in thermoelectric plants	(447)	(15)	(21)
Investment in non-consolidated companies	(153)	(207)	(53)
Dividends received from non-consolidated companies	11	24	8
Restricted deposits for legal proceedings	(84)	(140)	(95)
Other	1		93
	<u>          </u>	<u>          </u>	<u>          </u>
Net cash used in investing activities	(6,656)	(4,592)	(3,651)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Cash flows from financing activities</b>			
Short-term debt, net issuances and repayments	(367)	(1,648)	(962)
Proceeds from issuance of long-term debt	1,937	2,347	1,535
Principal payments on long-term debt	(1,173)	(1,023)	(1,325)
Project financings	(746)	760	608
Payment of lease obligations	(247)	(465)	(154)
Dividends paid to stockholders	(999)	(1,702)	(512)
Dividends paid to minority interests	(19)	(23)	
	<u>          </u>	<u>          </u>	<u>          </u>
Net cash used in financing activities	(1,614)	(1,754)	(810)
	<u>          </u>	<u>          </u>	<u>          </u>
Increase (decrease) in cash and cash equivalents	(1,983)	2,397	3,253
Effect of exchange rate changes on cash and cash equivalents	(2,076)	(863)	(442)
Cash and cash equivalents at beginning of year	7,360	5,826	3,015
	<u>          </u>	<u>          </u>	<u>          </u>
Cash and cash equivalents at end of year	3,301	7,360	5,826
	<u>          </u>	<u>          </u>	<u>          </u>

The accompanying notes are an integral part of these consolidated financial statements.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Cash Flows  
Expressed in Millions of United States Dollars**

(continued)

	Years ended December 31		
	2002	2001	2000
Cash paid during the period for			
Interest	200	393	622
Income taxes	812	951	1,473
Withholding income tax on financial investments	120	178	116
	<b>█</b>	<b>█</b>	<b>█</b>
Non-cash investing and financing transactions during the period			
Capital lease obligations	144	406	293
Project finance expenditures funded by special purpose companies	946	1,121	1,026
Net assets acquired in purchased business combination with Repsol - YPF		424	
Transfer of Government securities to PETROS	313	2,140	216
	<b>█</b>	<b>█</b>	<b>█</b>

The accompanying notes are an integral part of these consolidated financial statements.



**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Changes in Stockholders' Equity**  
**Expressed in Millions of United States Dollars, Except number of shares and per-share amounts**

	Years ended December 31		
	2002	2001	2000
<b>Preferred stock</b>			
Balance January 1	1,882	1,882	1,882
Capital increase with undistributed earnings reserve	577		
Balance December 31	2,459	1,882	1,882
<b>Common stock</b>			
Balance January 1	2,952	2,952	2,952
Capital increase with undistributed earnings reserve	809		
Balance December 31	3,761	2,952	2,952
<b>Capital reserves</b>			
Balance January 1	128	37	33
Transfer from (to) unappropriated retained earnings	(39)	91	4
Balance December 31	89	128	37
<b>Accumulated other comprehensive income</b>			
<b>Cumulative translation adjustments</b>			
Balance January 1	(11,854)	(9,159)	(7,980)
Change in the period	(5,452)	(2,695)	(1,179)
Balance December 31	(17,306)	(11,854)	(9,159)
<b>Amounts not recognized as net periodic pension cost</b>			
Balance January 1	(1,867)	(1,516)	(1,704)
Decrease (increase) in additional minimum Liability	724	(524)	281
Tax effect on above	(218)	173	(93)
Balance December 31	(1,361)	(1,867)	(1,516)

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Changes in Stockholders' Equity**  
Expressed in Millions of United States Dollars, Except number of shares and per-share amounts

(continued)

	Years ended December 31		
	2002	2001	2000
<b>Unrealized gains (losses) on available-for-sale securities</b>			
Balance January 1	13	65	(79)
Unrealized gains (losses)	(36)	(77)	39
Realization of previously unrecognized losses on ELET/SIBR investments (Note 5(a))			175
Tax effect on above	12	25	(70)
Balance December 31	<u>(11)</u>	<u>13</u>	<u>65</u>
<b>Appropriated retained earnings</b>			
Legal reserve			
Balance at January 1	768	648	424
Transfer from (to) unappropriated retained earnings	(125)	120	224
Balance at December 31	<u>643</u>	<u>768</u>	<u>648</u>
Unrealized income reserve			
Balance at January 1		1,471	1,630
Transfer to unappropriated retained earnings		(1,471)	(159)
Balance at December 31			<u>1,471</u>
Undistributed earnings reserve			
Balance at January 1	5,886	3,648	39
Capital increase	(1,386)		
Transfer from (to) unappropriated retained earnings	278	2,238	3,609
Balance at December 31	<u>4,778</u>	<u>5,886</u>	<u>3,648</u>
Statutory reserve			
Balance at January 1	215	221	206
Transfer from (to) unappropriated retained earnings	(51)	(6)	15
Balance at December 31	<u>164</u>	<u>215</u>	<u>221</u>
Total appropriated retained earnings	<u>5,585</u>	<u>6,869</u>	<u>5,988</u>



**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Consolidated Statements of Changes in Stockholders' Equity**  
Expressed in Millions of United States Dollars, Except number of shares and per-share amounts

(continued)

	Years ended December 31		
	2002	2001	2000
<b>Unappropriated retained earnings</b>			
Balance at January 1	15,124	14,456	13,319
Net income for the year	2,311	3,491	5,342
Cash dividends (per share: 2002 US\$1.19, 2001 US\$1.62 and 2000 US\$ .45 to common and preferred shares)	(1,287)	(1,851)	(512)
Appropriation (to) from reserves	(63)	(972)	(3,693)
	<u>16,085</u>	<u>15,124</u>	<u>14,456</u>
Total stockholders' equity	<u>9,301</u>	<u>13,247</u>	<u>14,705</u>
<b>Comprehensive income is comprised as follows:</b>			
Net income for the year	2,311	3,491	5,342
Translation adjustments for the year	(5,452)	(2,695)	(1,179)
Amounts not recognized as net periodic pension cost	506	(351)	188
Unrealized gains (losses) on available-for-sale securities	(24)	(52)	27
	<u>(2,659)</u>	<u>393</u>	<u>4,378</u>

The accompanying notes are an integral part of these consolidated financial statements.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**1 The Company and its Operations**

Petróleo Brasileiro S.A. - PETROBRAS is Brazil's national oil company and, directly or through its subsidiaries (collectively, PETROBRAS or the Company), is engaged in the research, mining, refining, processing, trade and transport of oil from wells, shale and other rocks, its oil products, natural gas and other fluid hydrocarbons, in addition to other energy related activities; it may promote the research, development, production, transport, distribution and marketing of all forms of energy, as well as other related or similar activities.

PETROBRAS was incorporated under Law No. 2004 on October 3, 1953. Until November 1995, PETROBRAS was the exclusive agent of the Brazilian Federal Government (the Federal Government) for purposes of exploiting the Federal Government's constitutional and statutory control over activities involving exploration, production, refining, distribution, import, export, marketing and transportation of hydrocarbons and oil products in Brazil and its continental waters. When adopted in 1953, the relevant provisions of the Brazilian constitution and statutory law gave the Federal Government a monopoly in these areas subject only to the right of companies then engaged in oil refining and the distribution of oil and oil products to continue those activities in Brazil. Therefore, except for limited competition from those companies in their grandfathered activities, PETROBRAS had a monopoly over its businesses for approximately 42 years. As a result of a change in the Brazilian constitution in November 1995, and the subsequent and ongoing implementation of that change, PETROBRAS has ceased to be the Federal Government's exclusive agent in Brazil's hydrocarbons sector and has been operating in an environment of gradual deregulation and increasing competition.

In accordance with Law 9478 (Petroleum Law) and Law 9990, dated August 6, 1997 and July 21, 2000, respectively, the fuel market in Brazil was totally liberalized beginning January 1, 2002 permitting other companies to produce and sell on the domestic market, and also to import and export oil products.

**2 Summary of Significant Accounting Policies**

In preparing these consolidated financial statements, the Company has followed accounting policies that are in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of these financial statements requires the use of estimates and assumptions that affect the assets, liabilities, revenues and expenses reported in the financial statements, as well as amounts included in the notes thereto.

Estimates adopted by management include: oil and gas reserves, pension and health care liabilities, environmental obligations, depreciation, depletion and amortization, abandonment costs, contingencies and income taxes. While the Company uses its best estimates and judgments, actual results could differ from those estimates as future confirming events occur.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(a) Basis of presentation**

The consolidated financial statements have been prepared in accordance with U.S. GAAP, which differ in significant respects from the Brazilian accounting principles applied by PETROBRAS in its statutory financial statements prepared in accordance with the Brazilian Corporate Law and the regulations promulgated by the Brazilian Securities Commission - CVM.

The U.S. dollar amounts for the periods presented have been remeasured or translated from the Brazilian Reais amounts in accordance with Statement of Financial Accounting Standards ( SFAS ) No. 52 - Foreign Currency Translation ( SFAS 52 ) as applicable to entities operating in non-hyperinflationary economies.

Prior to 1998, Brazil was considered to have a highly inflationary economy, defined under SFAS 52 as an economy in which the cumulative inflation rate is approximately 100% or more over a three-year period. During the last quarter of 1997, the Brazilian economy ceased to be highly inflationary. Accordingly, on January 1, 1998 the Company changed its functional currency from the reporting currency ( U.S. dollar ) to the local currency (Brazilian real) and translated or remeasured the U.S. dollar amounts of monetary and non-monetary assets and liabilities into reais at the current exchange rate, and those amounts became the new accounting bases for such assets and liabilities.

The Company has translated all assets and liabilities into U.S. dollars at the current exchange rate (R\$ 3.5333 and R\$ 2.3204 to US\$ 1.00 at December 31, 2002 and 2001, respectively), and all accounts in the statements of income and cash flows (including amounts relative to local currency indexation and exchange variances on assets and liabilities denominated in foreign currency) at the average rates prevailing during the year. The net translation loss in the amount of US\$ 5,452 in 2002 (2001 - US\$ 2,695 and 2000 - US\$ 1,179) resulting from this remeasurement process was excluded from income and presented as a cumulative translation adjustment ( CTA ) within Other Comprehensive Income in the statement of stockholders' equity.

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**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(b) Basis of consolidation**

The consolidated financial statements include the accounts of the Company and all majority-owned subsidiaries in which the Company directly or indirectly has either a majority of the equity of the subsidiary or otherwise has management control. Intercompany accounts and transactions are eliminated.

The following majority-owned subsidiaries are consolidated:

Subsidiary companies	Activity
Petrobras Química S.A. PETROQUISA	Petrochemical
Petrobras Distribuidora S.A.7 BR	Distribution
BRASPETRO Oil Services company BRASOIL <sup>(1)</sup>	International operations
BRASPETRO Oil Company BOC <sup>(1)</sup>	International operations
PIB Petrobras Internacional BRASPETRO B.Ψ.	International operations
Petrobras Energia S.A. <sup>(2)</sup>	Energy
Petrobras Negócios Eletrônicos S.A. <sup>(2) (3)</sup>	Corporate
Petrobras Gás S.A. GASPETRO	Gas transportation
Petrobras International Finance Company PIFCO	Marketing
Petrobras Transporte S.A. TRANSPETRO	Transportation
Downstream Participações S.A.	Refining and distribution

(1) Subsidiaries are carrying on activities previously performed by Braspetro, a subsidiary that merged into Petrobras during 2002, according to the Company's new organization and management model. Braspetro B.V. was incorporated during 2002 as part of the restructuring process of the international segment.

(2) Incorporated during 2002.

(3) Company in pre-operational phase.

As described in Note 16(c), the Company's interests in Perez Companc S.A. and Petrolera Perez Companc S.A. were not consolidated by the Company at December 31, 2002.

**(c) Cash equivalents**

Cash equivalents consist of highly liquid investments that are readily convertible into cash and have an original maturity of three months or less at date of acquisition.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(d) Accounts receivable**

Accounts receivable is stated at estimated realizable values. An allowance for doubtful accounts is provided in an amount considered by management to be sufficient to meet probable future losses related to uncollectible accounts.

**(e) Inventories**

Inventories are stated as follows:

Raw materials comprise principally crude oil inventories, which are stated at the lower of average cost or market value.

Oil products and fuel alcohol are stated, respectively, at average refining and purchase cost, adjusted when applicable to their realizable value.

Materials and supplies are stated at average cost, not exceeding replacement value and imports in transit are stated at identified cost.

**(f) Investments in non-consolidated companies**

The Company uses the equity method of accounting for all long-term investments for which it owns between 20% and 49% of the investee's outstanding voting stock or has the ability to exercise significant influence over operating and financial policies of the investee. The equity method requires periodic adjustments to the investment account to recognize the Company's proportionate share in the investee's results, reduced by receipt of investee's dividends.

**(g) Government and marketable securities**

Until December 28, 2001, the Company held National Treasury Bonds Series P (NTN-P) as held-to-maturity securities. On that date, the Company exchanged its NTN-P securities for National Treasury Bonds Series B (NTN-B) issued by the Federal Government which are accounted for as available-for-sale securities in accordance with SFAS No. 115 Accounting for Certain Investments in Debt and Equity Securities (SFAS 115). The Company has maintained securities received in connection with the securitization of receivables as held-to-maturity.



**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(h) Property, plant and equipment**

**(i) Costs incurred in oil and gas producing activities**

The successful efforts method of accounting is used for oil and gas exploration, development and production activities.

**Property acquisition costs**

Costs of acquiring developed or undeveloped leaseholds including lease bonus, brokerage, and other fees are capitalized. The costs of undeveloped properties that become productive are transferred to a producing property account.

**Exploratory costs**

Exploratory wells that find oil and gas in an area requiring a major capital expenditure before production could begin are evaluated annually to assure that commercial quantities of reserves have been found or that additional exploration work is underway or planned. Exploratory costs that meet either of these tests are capitalized. Exploratory well costs not meeting either of these tests are charged to expense. All other exploratory costs (including geological and geophysical costs) are expensed as incurred.

**Development costs**

Costs of development wells including dry holes, platforms, well equipment and attendant production facilities are capitalized.

**Production costs**

Costs incurred with producing wells are expensed as incurred.

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**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**Abandonment costs**

Through December 31, 2002, the Company recorded abandonment costs in accordance with SFAS No. 19 - Financial Accounting and Reporting by Oil and Gas Production Companies ( SFAS 19 ). Under SFAS 19, the estimated costs of dismantlement and removal of oil and gas related facilities are accrued over the properties' production lives using the unit-of-production method and recognized as accumulated depreciation, depletion and amortization as the expense is recorded. The Company's abandonment liability was US\$ 1,166 and US\$ 1,369 at December 31, 2002 and 2001, respectively. At December 31, 2002 and 2001, the total anticipated costs of abandonment were US\$ 1,865 and US\$ 2,277, respectively. Effective January 1, 2003, the Company will adopt SFAS 143 for abandonment costs (see Note 2(s)).

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**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(ii) Depreciation, depletion and amortization**

Depreciation, depletion and amortization of leasehold costs of producing properties are recorded using the unit-of-production method by individual fields as the proved reserves are produced. Leased production platforms are depreciated on a straight-line basis over the estimated useful lives of the platforms. Depreciation, depletion and amortization of all other capitalized costs (both tangible and intangible) of proved oil and gas producing properties are recorded using the unit-of-production method by individual fields as the proved developed reserves are produced. Estimated dismantlement, restoration and abandonment costs and estimated salvage values are taken into account in determining amortization and depreciation provisions.

Other plant and equipment are depreciated on a straight-line basis over the following estimated useful lives:

Building and improvements	25 years
Equipment and other assets	3-25 years
Platforms	10-25 years
Pipelines	30 years

**(iii) Impairment**

In accordance with SFAS No. 144 Impairment of Long-Lived Assets, management reviews long-lived assets, primarily property, plant and equipment to be used in the business and capitalized costs relating to oil and gas activities, whenever events or changes in circumstances indicate that the carrying value of an asset or group of assets may not be recoverable on the bases of undiscounted future cash flows. The reviews are carried out at the lowest level of assets to which the Company is able to attribute identifiable future cash flows. The net book value of the underlying assets is adjusted to their fair value using a discounted future cash flows model, if the sum of the expected undiscounted future cash flows is less than the book value.

**(iv) Maintenance and repairs**

The actual costs of major maintenance, including turnarounds at refineries and vessels, as well as other expenditures for maintenance and repairs, are expensed as incurred.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

**(v) Capitalized interest**

Interest is capitalized on specific projects when construction takes considerable time and involves major expenditures. Capitalized interest is allocated to property, plant and equipment and amortized over the estimated useful lives of the related assets.

**(h) Revenues, costs and expenses**

Revenues from sales of crude oil and oil products, petrochemical products and others are recognized on an accrual basis when title has transferred to the customer. Revenues from sales of natural gas are accounted for when the natural gas is transferred to the customer. Differences between these sales and the Company's share of production are routinely adjusted. These differences are not significant. Costs and expenses are accounted for on an accrual basis.

**(i) Accounting for the effect of Federal Government regulation**

The Brazilian oil and gas industry has been subject to extensive regulation by the Federal Government. PETROBRAS has been used by the Federal Government to implement these various regulations. Since 1996, the Federal Government has introduced several measures to deregulate the oil and gas industry in Brazil, including the enactment of the Petroleum Law in 1997. One of the consequences of the Oil Law was the implementation of new regulations on July 29, 1998 that significantly changed the Federal Government's regulation of the Brazilian oil and gas market. As a result, the financial statements may not be comparable to those of other oil and gas companies.

As provided in the Petroleum Law, the fuel market in Brazil was totally liberalized as of January 1, 2002 permitting other companies to produce and sell on the domestic market and, also, import and export oil products. Additionally, as of January 1, 2002, PETROBRAS is no longer required to charge the prices established by the Federal Government on the sale of oil products, and the realization price is no longer established by a formula adjusted to the international market. Therefore the PPE is no longer collected (see *Net operating revenues* below).

Considering the liberation of the market and current legislation, as from January 1, 2002, the Petroleum and Alcohol Account will no longer be used to reimburse expenses related to the supply of oil products and fuel alcohol to PETROBRAS and third parties. The movements in the account during 2002 relate only to i) payments and adjustments mandated by the Agência Nacional do Petróleo-ANP ( ANP ) with no impact on the income statement and ii) adjustments resulting from the audit of the account by the ANP.

**PETRÓLEO BRASILEIRO S.A. -  
PETROBRAS and Subsidiaries**

**Notes to the Consolidated Financial Statements  
(Expressed in millions of United States dollars,  
unless otherwise stated)**

The impact of Federal Government regulation on the Company's balance sheet and operating structure has been recorded in the Petroleum and Alcohol Account as of, and for the years ended, December 31, 2002, 2001 and 2000 (see Note 10). The impact of this regulation is recorded in the income statement to correspond with underlying transactions when compliance with applicable law has occurred and collection is reasonably assured.

The Company's income statements for the years ended December 31, 2001 and 2000 were impacted by Federal Government regulation in the following ways:

*Sales of products and services.* Products were sold at prices established by the Federal Government for each type of basic oil product on the basis of political and economic conditions in Brazil.

*Net operating revenues.* Net operating revenues were determined using actual quantities sold and the realization price, or PR. The Federal Government determined the PR for each of PETROBRAS' principal oil products through application of pricing formulas that, with a lag of approximately one month, reflected changes in the U.S. dollar/Real exchange rate and international market prices for benchmark products. The difference between the price at which PETROBRAS sold each of its oil products, net of value added and other taxes on sales, and the PR for that product was the *Parcela de Preços Específica*, or PPE, which has been presented as an adjustment to sales of products and services with a corresponding amount recorded in the Petroleum and Alcohol Account.

*Cost of Sales.* Import costs are recorded at prices actually paid by the Company. The Company purchased and sold alcohol on behalf of the Federal Government and recorded the net effect of each of these sales against the Petroleum and Alcohol Account with an offsetting adjustment to cost of sales. However, during 2001 and 2000 the amount of volumes purchased and sold in this capacity was not significant.

*Selling, general and administrative expenses.* The Federal Government provided reimbursements to PETROBRAS and distributors (including BR) of transportation subsidies. These amounts increased the balance of the Petroleum and Alcohol Account and reduced selling, general and administrative expenses.

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The impact on the income statement for the three years ended December 31, 2002 is summarized as follows, by income statement component:

		Years ended December 31		
		2002	2001	2000
	Specific parcel price PPE (collected) advanced	—	(969)	288
	Cost of sales (increase) decrease			
	Commercialization of alcohol	—	(68)	19
	Selling, general and administrative expenses (decrease)			
	Transport of oil products	—	(45)	(81)
	Financial income (financial income on the Petroleum and Alcohol Account)	2	16	35

The Company's balance sheets as of December 31, 2002, 2001 and 2000 were impacted by Federal Government regulation in the following way:

*Payments to third parties.* PETROBRAS reimbursed distributors and alcohol producers who incurred transportation and other costs in categories specified by the Federal Government in connection with commercialization of oil products and fuel alcohol, and were entitled to claim reimbursement under existing regulations. Additionally, PETROBRAS was required to fund the administrative expenses of ANP. These payments were made after determination from the Federal Government, were recorded as an increase in the Petroleum and Alcohol Account and did not impact the income statement.

As from January 1, 2002, PETROBRAS is no longer required to charge the prices established by the Federal Government on the sale of oil products, and the realization value is no longer established by a formula parameterized to the international market. Therefore the PPE is no longer collected and a new charge has been mandated by the Federal Government. The *Contribuição de Intervenção no Domínio Econômico* (Contribution of Intervention in the Economic Domain Charge - CIDE) on the importation and sale of fuels was established by Law 10,336 dated December 19, 2001. The CIDE is a per-transaction payment to the Brazilian Government required to be made 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.

**(k) Income taxes**

The Company accounts for income taxes in accordance with SFAS No. 109 - Accounting for Income Taxes ( SFAS 109 ), which requires an asset and liability approach to recording current and deferred taxes. The effects of differences between the tax bases of assets and liabilities and the amounts recognized in the financial statements have been treated as temporary differences for the purpose of recording deferred income taxes.

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PETROBRAS records the tax benefit of all net operating losses as a deferred tax asset and recognizes a valuation allowance for any part of this benefit which management believes that will not be recovered against future taxable income using a more likely than not criterion.

**(l) Employee postretirement benefits**

The Company sponsors a contributory defined-benefit pension plan covering substantially all of its employees, which is accounted for by the Company in accordance with SFAS No. 87 Employers Accounting for Pensions ( SFAS 87 ).

In addition, the Company provides certain health care benefits for retired employees and its dependents. The cost of such benefits is recognized in accordance with SFAS No. 106 Postretirement Benefits Other Than Pensions ( SFAS 106 ).

The Company also contributes to the national pension, social security and redundancy plans at rates based on payroll, and such contributions are expensed as incurred. Further indemnities may be payable upon involuntary severance of employees but, based on current operating plans, management does not believe that any amounts payable under this plan will be significant.

**(m) Environmental and remediation costs**

Environmental costs relating to current operations are expensed or capitalized, as appropriate, depending on whether such costs are expected to provide future economic benefits. Liabilities are recognized when the costs are considered probable and can be reasonably estimated. Measurement of liabilities is based on currently enacted laws and regulations, existing technology and site-specific costs.

**(n) Compensated absences**

The liability for future compensation of employees for vacations is accrued as earned.

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**(o) Earnings per share**

Earnings per share are computed using the two-class method, which is an earnings allocation formula that determines earnings per share for both preferred stock, a participating security, and common stock. The preferred stock is participating since the preferred shares participate in dividends and undistributed earnings with the common stock at a predetermined formula. Such formula allocates the net income, as if all of the net income for each year had been distributed, first to the preferred shares in an amount equal to the preferred shares' priority minimum annual dividend of 3% of their stockholders equity or 5% of their paid-in capital as stated in the statutory accounting records, then to common stock in an amount equal to the preferred shares' priority dividend on a per share basis and any remaining net income is allocated equally to the common and preferred shares.

Each American Depositary Share (ADS) for common stock represents one share of the Company's common stock or one share of the Company's preferred stock and, in each case, is presented together with earnings per share.

**(p) Research and development costs**

Research and development costs are charged to expense when incurred.

**(q) Accounting for derivatives and hedging activities**

The Company may use derivative financial instruments to hedge the risk of unfavorable price movements on crude oil purchases. Gains and losses on these hedges are deferred until the underlying hedged transaction impacts earnings and are recognized as adjustments to cost of products or sales. Cash flows associated with these derivatives are reported with the underlying hedged transaction's cash flows. Transaction fees associated with these derivatives are expensed as incurred.

The Company may also use derivative financial instruments to hedge the risk of unfavorable exchange-rate movements affecting its foreign currency-denominated indebtedness. Gains and losses from changes in the fair value of these contracts are recognized in income currently, in the same line item as foreign exchange gains and losses arising on the Company's outstanding debt balance.

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The Company adopted SFAS 133 on January 1, 2001 and determined that none of its derivative financial instruments that had previously been treated as hedges qualified for hedge accounting under the new standard and the net-of-tax cumulative-effect recorded on January 1, 2001 to recognize the Company's derivative financial instruments were not significant.

Although SFAS 133 provides a significant change in the accounting guidance related to derivative instruments and hedging activities, the Company has determined that the more stringent accounting and documentation requirements under SFAS 133 do not cause any significant changes in its overall risk management strategy and in its overall hedging activities.

**(r) Recently issued accounting pronouncements**

FASB has recently issued (i) SFAS No. 143 Accounting for Asset Retirement Obligations ( SFAS 143 ) in August 2001, (ii) SFAS No. 145 Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections ( SFAS 145 ) in April 2002 and (iii) SFAS No. 146 Accounting for Costs Associated with Exit or Disposal Activities ( SFAS 146 ) in July 2002.

SFAS 143 will be adopted by the Company, as required, on January 1, 2003 and its primary impact will be to change the method of accruing for upstream site restoration costs. Under SFAS 143, the discounted fair value of asset retirement obligations will be recorded as liabilities when they are incurred, which are typically at the time the related assets are installed. Amounts recorded for the related assets will be increased by the amount of these obligations. Over time the liabilities will be accreted for the change in their present value and the initial capitalized costs will be depreciated over the useful lives of the related assets.

While the Company continues to evaluate the impact of adopting SFAS 143, preliminary estimates indicate that the cumulative adjustment for the change in accounting principle will result in an increase of after-tax income of approximately US\$ 700 as of January 1, 2003. This adjustment is due to the difference in the method of accruing site restoration costs under SFAS 143 compared with the method required by the SFAS 19. As mentioned, under SFAS 19 site restoration costs are accrued on a unit-of-production basis of accounting as the oil and gas is produced. The SFAS 19 method matches the accruals with the revenues generated from production and results in most of the costs being accrued in early field life, when production is at the highest level. Because SFAS 143 requires accretion of the liability as a result of the passage of time using an effective interest method, the majority of the costs will be accrued towards the end of field life, when production is at the lowest level. The cumulative income adjustment described above results from reversing the higher liability accumulated under SFAS 19 in order to adjust it to the lower discounted amount resulting from transition to SFAS 143. This amount being reversed in transition, which was previously charged to operating earnings under SFAS 19, will be charged to earnings under SFAS 143 in future years.

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SFAS 145 addresses how to report gains or losses resulting from the early extinguishment of debt. Under current accounting rules, any gains or losses are reported on early extinguishment of debt as extraordinary items. If SFAS 145 is adopted, it would require an evaluation of whether the debt extinguishment is truly extraordinary in nature. If the debt is routinely extinguished early, the gain or loss would be included in income from continuing operations. This statement will be effective for 2003 year-end reporting. The Company estimates that adoption of SFAS 145 will not have a significant impact on its financial condition, results of operations and cash flows.

SFAS 146 requires recognition of costs associated with exit or disposal activities when they are incurred rather than when an exit or disposal plan occur. Examples of costs covered by this guidance include lease termination costs, employee severance costs that are associated with a restructuring, discontinued operations, plant closings or other exit or disposal activities. The provisions of this statement are effective for fiscal years beginning after December 31, 2002 and will impact any exit or disposal activities initiated after January 1, 2003. The Company estimates that adoption of SFAS 146 will not have a significant impact on its financial condition, results of operations and cash flows.

**3 Income Taxes**

Income taxes in Brazil comprise federal income tax and social contribution, which is an additional federal income tax. The statutorily enacted tax rates applicable in the years presented are as follows:

	<b>Years ended December 31 - %</b>		
	<b>2002</b>	<b>2001</b>	<b>2000</b>
Federal income tax rate	25	25	25
Social contribution (*)	9	9	9 to 12
Composite tax rate	34	34 to 37	34 to 37

(\*) The social contribution rate was increased to 12% for the period from May 1, 1999 to January 31, 2000 and reduced to 9% for the period from February 1, 2000 to December 31, 2002.

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During 2001, the Company recognized a benefit in the amount of US\$ 111, relating to the reversal of a tax provision established in previous years in connection with the privatization of certain affiliates of PETROQUISA included in the National Privatization Program (PND) due to expiration of the statute of limitations.

Also during 2001, certain changes were introduced in the Brazilian tax legislation, including a requirement that earnings from foreign subsidiaries be included in the determination of current taxes payable in Brazil. As a result, the Company recorded a provision of US\$ 100 relating to income taxes on its foreign subsidiaries undistributed taxable income generated since 1996.

The following reconciles the tax calculated based upon statutory tax rates to the income tax expense recorded in the financial statements.

	Years ended December 31		
	2002	2001	2000
Income before income taxes and minority interest	3,232	4,792	7,803
Tax expense at statutory rates	(1,099)	(1,629)	(2,653)
Adjustments to derive effective tax rate:			
Reversal of income tax		111	
Tax benefit of interest on stockholders' equity	241	307	315
Non-deductible postretirement health benefits	(73)	(73)	(102)
Taxes on unremitted earnings of foreign subsidiaries		(100)	
Foreign income subject to different tax rates		94	51
Change in valuation allowance	(204)	(38)	(94)
Others	(18)	(61)	(40)
Income tax expense per consolidated statement of income	(1,153)	(1,389)	(2,523)
Domestic taxes	(1,098)	(1,256)	(2,496)
Foreign taxes	(55)	(133)	(27)
	(1,153)	(1,389)	(2,523)

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TBG, a subsidiary of GASPETRO, has accumulated tax loss and negative income tax and social contribution carryforwards amounting to US\$ 768 (US\$ 508 in 2001) as of December 31, 2002, which could be offset against future taxable income to a limit of 30% of annual income, based on Law No. 9249/95, which in the opinion of the TBG management, will occur within the useful life of the Bolivia-Brazil Gas Pipeline project.

However, considering the long estimated term for utilization, these tax credits, totaling US\$ 239 (US\$ 167 2001), were provided for in a valuation allowance in the consolidated financial statements for December 31, 2002 and 2001. The accounting recognition of these credits is reviewed annually.

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The major components of the deferred income tax accounts in the consolidated balance sheet are as follows:

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
<b>Current</b>		
<b>Assets</b>		
Inventories	39	66
Lease obligations	96	83
<b>Net current deferred tax assets</b>	<b>135</b>	<b>149</b>
	<b>—</b>	<b>—</b>
<b>Non-current</b>		
<b>Assets</b>		
Employees post-retirement benefits, net of unrecognized pension obligation	531	409
Deferred assets	51	43
Tax loss carryforwards	243	197
Investments	2	87
Lease obligations	618	426
Project finance	706	582
Provision for notification from INSS	38	
Provision for losses of energy	70	
Profit sharing provision	41	
Other temporary differences	277	257
Valuation allowance	(239)	(170)
	<b>2,338</b>	<b>1,831</b>
	<b>—</b>	<b>—</b>
<b>Liabilities</b>		
Capitalized exploration and development costs	670	709
Accelerated depreciation	7	34
Property, plant and equipment	1,762	1,740
Tax effect on unrealized gain on investments available-for-sale		7
Other temporary differences	22	58
	<b>2,461</b>	<b>2,548</b>
	<b>—</b>	<b>—</b>
<b>Net long-term deferred tax liabilities</b>	<b>123</b>	<b>717</b>
	<b>—</b>	<b>—</b>

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As a result of the NTN-P swap transaction in 2001, described in Note 5, the income tax on interest on government securities held-to-maturity, which payment had been deferred, became payable and the corresponding provision for income tax and social contribution was transferred to current liabilities on December 28, 2001.

Although realization of net deferred tax assets is not assured, management believes that, except where a valuation allowance has been provided, such realization is more likely than not to occur. The amount of the deferred tax asset considered realizable could, however, be reduced if estimates of future taxable income are reduced. Tax loss carryforwards do not expire and are available for offset against future taxable income, limited to 30% of taxable income in any individual year. The following presents the changes in the valuation allowance for the years ended December 31, 2002, 2001 and 2000:

	<u>2002</u>	<u>2001</u>	<u>2000</u>
Balance at January 1,	(170)	(147)	(86)
Additions	(69)	(23)	(61)
	<u>          </u>	<u>          </u>	<u>          </u>
Balance at December 31,	(239)	(170)	(147)
	<u>          </u>	<u>          </u>	<u>          </u>

**4 Cash and Cash Equivalents**

	<u>As of December 31</u>	
	<u>2002</u>	<u>2001</u>
Cash	661	789
Short-term investment funds local currency	2,404	5,856
Time deposits U.S. dollars	236	715
	<u>          </u>	<u>          </u>
	3,301	7,360
	<u>          </u>	<u>          </u>

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**5 Government Securities**

**(a) Held-to-maturity**

The Company's National Treasury Bonds Series P (NTN-P) were received in exchange for other securities received by the Company during the 1990's for the sale of certain assets under the National Privatization Program (PND). The bonds were denominated in reais and earned interest of 6% p.a. plus the variation of the TR (Reference Rate) and had maturities from 2007 to 2010.

The NTN-P notes could not be traded in the secondary market; therefore, they were recorded at face value plus accrued interest. The bonds could only be redeemed at the maturity date or at an earlier date, at face value plus accrued interest, if they were used to pay debt to the Federal Government or agencies related to the Federal Government. The NTN-P were classified as held-to-maturity in accordance with SFAS 115.

On December 28, 2001, Petrobras entered into a contract with the Federal Government to exchange the restricted NTN-P for unrestricted National Treasury Notes Series B (NTN-B) with a face value of US\$ 3,239. The NTN-B were created on July 4, 2001 by means of Federal Decree No 3859. The exchange was accounted for at fair value and a loss of US\$ 1,099 was recorded in the results of operations for 2001. The NTN-B were classified as available-for-sale, and on December 28, 2001, the Company transferred NTN-B notes with a fair value of US\$ 1,475 to PETROS, the Company's current pension plan for employees (see Note 14) to increase pension assets.

**(b) Available-for-sale**

**NTN-B**

The Company has retained title to NTN-B, mentioned in 5(a) above, amounting to US\$ 665 as of December 31, 2001. These bonds have been advanced to PETROS and the Company intends to utilize them to provide incentives for participants to migrate from the PETROS Plan to the PETROBRAS VIDA, the Company's new pension plan for employees (see Note 14). Accordingly, as the Company still has the risks and rewards relating to the bonds, they are accounted for as securities available-for-sale and their corresponding earnings will be recorded on an amortized cost basis, with changes in fair value presented in the statement of stockholders' equity as a component of other comprehensive income.

On December 30, 2002, the Company effectively transferred a portion of the NTN-B with a fair value of US\$ 388 to PETROS to further increase plan assets. Accordingly, at December 31, 2002, the fair value of the NTN-B held by the Company as advances to PETROS amount to US\$ 176.

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The NTN-B are denominated in reais, earn interest of 6% p.a. plus the variation of the IPCA (Consumer Price Index Adjusted) and mature in 2031.

**6 Accounts Receivable**

Accounts receivable consisted of the following:

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
Trade		
Third parties	2,827	2,899
Related parties (Note 22)	329	100
Others		680
	<u>3,156</u>	<u>3,679</u>
Less: allowance for uncollectible accounts	(701)	(708)
	<u>2,455</u>	<u>2,971</u>
Less: Long-term accounts receivable, net	(188)	(212)
Current accounts receivable, net	<u>2,267</u>	<u>2,759</u>



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	<b>As of December 31</b>		
	<b>2002</b>	<b>2001</b>	<b>2000</b>
Allowance for uncollectible accounts			
Balance at January 1,	(708)	(312)	(283)
Additions	(56)	(421)	(33)
Write-offs	63	25	4
	<u>          </u>	<u>          </u>	<u>          </u>
Balance at December 31	(701)	(708)	(312)
Allowance on short-term receivables	(77)	(66)	(57)
	<u>          </u>	<u>          </u>	<u>          </u>
Allowance on long-term receivables	(624)	(642)	(255)
	<u>          </u>	<u>          </u>	<u>          </u>

At December 31, 2002 and 2001, long-term receivables include US\$ 569 and US\$ 532 respectively relating to payments made by the Company to suppliers and subcontractors on behalf of certain contractors. These contractors had been hired by the subsidiary BRASOIL for the construction/conversion of vessels into FPSO ( Floating Production, Storage and Offloading ) and FSO ( Floating, Storage and Offloading ) and failed to make the payments to their suppliers and subcontractors. The Company made the payments to avoid further delays in the construction/conversion of the vessels and consequent losses to BRASOIL.

Based on opinions from the legal advisers of BRASOIL, these payments can be reimbursed, since they represent a right of BRASOIL with respect to the contractors, for which reason judicial action was filed with international courts to seek financial reimbursement. However, as a result of the uncertainties with regards to the probability of receiving all the amounts disbursed, the Company recorded a provision for uncollectible accounts for all credits that are not backed by collateral, in the amount of US\$ 394, classified under other expenses, net in 2001.

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The Company prevailed in the lawsuit filed with an American court by the insurance companies Fidelity & Guaranty Company and American Home Assurance Company, which had attempted to obtain, since 1997, a legal ruling in the United States to exempt the insurance companies from the obligation to pay the sum insured for the construction of platforms P-19 and P-31. As a result of a court decision by the first level of the Federal District Court of the Southern District of New York, the Company was entitled to receive losses and damages in the amount of US\$ 237 million, plus interest and reimbursement of legal expenses through the settlement date. This decision is pending appeal to the Appeals Court of the State of New York, and therefore the Company has not recognized this amount in the financial statements.

**7 Inventories**

Inventories are comprised of the following:

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
Products		
Oil products	982	1,088
Fuel alcohol	86	186
	<u>1,068</u>	<u>1,274</u>
Raw materials, mainly crude oil	990	583
Materials and supplies	482	542
	<u>2,540</u>	<u>2,399</u>

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**8 Property, Plant and Equipment**

**(a) Composition of balance**

Property, plant and equipment, at cost, are summarized as follows:

	As of December 31					
	2002			2001		
	Cost	Accumulated Depreciation	Net	Cost	Accumulated depreciation	Net
Buildings and improvements	383	(215)	168	550	(298)	252
Oil and gas assets	17,465	(10,374)	7,091	21,512	(13,230)	8,282
Equipment and other assets	6,635	(3,491)	3,144	9,330	(5,064)	4,266
Capital lease - platforms	3,351	(852)	2,499	2,752	(866)	1,886
Rights and concessions	121	(4)	117	150	(3)	147
Land	105		105	149		149
Materials	184		184	173		173
Expansion projects - Construction and installations in progress:						
Exploration and production	3,477		3,477	2,731		2,731
Supply	1,105		1,105	876		876
Gas and Energy	243		243	193		193
Distribution	64		64	37		37
Other	27		27	187		187
	<u>33,160</u>	<u>(14,936)</u>	<u>18,224</u>	<u>38,640</u>	<u>(19,461)</u>	<u>19,179</u>

During 2002, the Company capitalized US\$ 139 of interest cost (2001 US\$ 123; 2000 US\$ 223).  
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**(b) Impairment**

For the years ended December 31, 2002, 2001 and 2000, the Company recorded impairment charges of US\$ 75, US\$ 145 and US\$ 37, respectively. During 2002, the total impairment charge was related to producing properties in Brazil, primarily recorded in the Company's Voador field (US\$ 42) in the Campos basin, Caravelas field (US\$ 15) in the Santos basin and Massape field (US\$ 4) in the Reconcavo basin. During 2001, US\$ 129 of the impairment charge was related to producing properties in Brazil and was primarily recorded in the Company's Voador field (US\$ 88) in the Campos basin and Caravelas field (US\$ 30) in the Santos basin. The remaining US\$ 16 was recorded in the international segment primarily in the Company's Upia field (US\$ 13) located in Colombia. During 2000, US\$ 15 of the impairment charge was related to producing properties in Brazil and was primarily recorded in the Company's Cidade de São Sebastião Ferreira field (US\$ 5) in the Sergipe Alagoas basin. The remaining US\$ 22 was recorded in the international segment, primarily in the Company's Upia field (US\$ 16) located in Colombia. These charges were recorded based upon the Company's annual assessment of the fields using prices consistent with those used in the Company's overall strategic plan.

The writedown of proved properties was determined by comparing the book values of the properties to their undiscounted future cash flows. For those properties where the book value exceeded the undiscounted future cash flows, the book values were written down to fair value measured by calculating the net present value of the future cash flows. There were no fixed price forward sales considered in the discounted cash flow models.

**(c) Return of exploration areas to the ANP**

During 2002, PETROBRAS returned to the ANP the rights to over five exploratory concessions where it had not made any oil or gas discoveries, reaching a total of 92 returns out of the 115 concessions granted to the Company on August 6, 1998. Also, during 2002 PETROBRAS returned to the ANP two of the five exploratory areas acquired in June of 1999.

**(d) P-36 Platform Accident**

On March 15, 2001, an accident occurred on the Company's P-36 semi-submersible oil and gas production platform located in the Roncador Field in the Campos basin, which resulted in the total loss of the platform on March 20, 2001. As a result of the accident, the Company recorded a total loss of US\$ 155 during 2001.

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**9 Investments in Non-Consolidated Companies and Other Investments**

PETROBRAS conducts portions of its business through investments in companies accounted for using the equity and cost methods. These non-consolidated companies are primarily engaged in the petrochemicals and products transportation businesses.

The Company's participation in the voting shares of its equity non-consolidated companies ranged from 20% to 49%. At December 31, 2002, the Company's investment in these equity non-consolidated companies amounted to US\$ 131 (2001 - US\$ 159), and the Company recorded equity gains (losses) in results of non-consolidated companies of US\$(178) for the year ended December 31, 2002 (2001 - US\$ (8); 2000 - US\$ 26).

The Company also holds interests in other companies in which the investment accounts for less than 20% of the investee's total voting shares, which it classifies as available for sale. At December 31, 2002 and 2001, the Company had invested US\$ 219 and US\$ 321, of which US\$ 101 and US\$ 154, respectively, was invested in companies with publicly traded shares. The Company's investment in these companies with publicly traded shares has been recorded at market value. The Company has recorded unrealized gains (losses) for the difference between the fair value and the cost of the investment on these investments of US\$ (16) and US\$ 19 as of December 31, 2002 and 2001. These holding (losses) gains are reflected as a component of stockholder's equity, net of tax, with changes in the unrealized balance recorded as a component of comprehensive income.

Included in the investments mentioned above are investments in companies for the purpose of developing, constructing, operating, maintaining and exploring thermoelectric plants included in the federal government's Priority Thermoelectric Energy Program, with equity investments between 10% and 50%. The balance of the investments as of December 31, 2002, includes US\$ 38 related to investments in thermoelectric companies; US\$ 34 was accounted for using the equity method due to the Company's ability to exert significant influence and US\$ 4 was accounted for using the cost method.

**10 Petroleum and Alcohol Account - Receivable from Federal Government**

**(a) Background**

The Petroleum and Alcohol Account - Receivable from Federal Government (the Petroleum and Alcohol Account) has been used to accumulate the impact of the Federal Government's regulation policies for the Brazilian oil and gas industry on PETROBRAS. The Petroleum and Alcohol Account accrues financial income on its outstanding balance at the Referential Rate Index - TR, which was 2.8% in 2002 (2.2% in 2001).

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As provided in the applicable regulations, the Petroleum and Alcohol Account is a legal, valid and binding receivable from the Federal Government and collectibility of the receivable is not subject to future operations. The applicable regulations also provide that the Company has the right to offset amounts owed to the Federal Government relating to the regulation policies of the Brazilian oil and gas industry against the receivable. These increases and decreases in the Petroleum and Alcohol Account have been recognized in accordance with applicable law when the underlying transaction occurred.

According to specific legislation, until December 31, 2001, the Petroleum and Alcohol Account was realized through collection of the Specific Parcel Price-PPE generated by the sale of the majority of basic oil products (gasoline, diesel oil and LPG). The PPE represented the difference between the selling prices of these products at the refinery (net of ICMS and other charges levied on sales), fixed in reais by the Federal Government, and the corresponding realization prices for such products, which was the basis for calculating net operating revenues. The realization price (PR) for each oil product was determined on the basis of a pricing formula established by the Federal Government that, with a lag of approximately one month, reflected changes in oil products quotations on the international market and the exchange rate. When the invoicing price net of sales taxes exceeded the realization price, the PPE collection was positive and reduced the balance of the Petroleum and Alcohol Account. Conversely, when the invoicing value net of sales taxes was less than the realization price, the PPE collection was negative and increased the balance of the Petroleum and Alcohol Account.

After December 31, 2001 the expenses related to alcohol programs, approved by the Interministerial Council for Sugar and Alcohol will be supported by a portion of the financial resources derived from collection of the CIDE, as stipulated in Law No. 10453 of May 13, 2002.

**(b) Liberalization of the fuel market in Brazil**

In accordance with the Petroleum Law and subsequent legislation, the fuel market in Brazil was totally liberalized as of January 1, 2002. Therefore, as of this date the Petroleum and Alcohol accounts will no longer be used to reimburse expenses in connection with the Federal Government's regulating policy on the price of oil products and fuel alcohol to PETROBRAS and third parties. Accordingly, the Petroleum and Alcohol account will only include changes in amounts with triggering events having occurred before December 31, 2001, in accordance with Law No. 10453, of May 13, 2002, and mandated by the ANP.

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**(c) Changes in the Petroleum and Alcohol Account**

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

	For the years ended December 31		
	2002	2001	2000
Opening balance	81	1,509	1,352
Advances (collections):			
PPE (1)	(6)	(969)	288
Reimbursements to third parties:			
Subsidies on fuel alcohol	235	45	
Others	24	17	19
Total reimbursements to third parties	259	62	19
Reimbursements to PETROBRAS			
Transport of oil products (1)	(6)	45	81
Net result of fuel alcohol commercialization activities (2)		68	(19)
Total reimbursements to PETROBRAS	(6)	113	62
Total reimbursements	253	175	81
Financial income	2	16	35
Results of audit conducted by the Federal Government (3)	(29)	(405)	(106)
Translation loss (4)	(119)	(245)	(141)
Ending balance - December 31	182	81	1,509

(1) Recorded as Other expenses, net during 2002.

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

(3) US\$ 29, US\$ 405 and US\$ 106 in 2002, 2001 and 2000 respectively were recorded as a component of other expenses, net and US\$ 1 in 2000 was recorded as a component of monetary and exchange variation on monetary assets and liabilities, net.

(4) Translation losses are recorded as a component of the cumulative translation adjustment.

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The balance of the Petroleum and Alcohol Account as of December 31, 2002, represents a credit of PETROBRAS against the Federal Government in the amount of U.S.\$ 182, an increase of U.S.\$ 101 when compared with December 31, 2001, principally as a result of a provision of U.S.\$ 259 referring to expenses 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 the ANP.

**(d) National Treasury Bonds Series H (NTN-H)**

On June 30, 1998, PETROBRAS and the Federal Government reached an agreement whereby the Federal Government issued National Treasury Bonds - Series H (NTN-H) into a federal depository on behalf of PETROBRAS to support the balance of the account. The value of the outstanding bonds at December 31, 2002 was US\$ 46, at which time the balance of the Petroleum and Alcohol Account was US\$ 182. The legal, valid, and binding nature of the account is not affected by any difference between the balance of the account and the value of the outstanding bonds.

The Brazilian Government, upon PETROBRAS' consent, can effect the cancellation of all or a portion of the bonds' outstanding balance. The NTN-H will mature on June 30, 2003 and PETROBRAS, actually, has no other rights on those bonds; withdrawal or transfers are not allowed.

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**(e) Certification by the Federal Government**

The Federal Government certified the balance of the Petroleum and Alcohol Account as of March 31, 1992. In September 1999 the Ministers of Finance, Agriculture and Internal Supply, and Mines and Energy created a Working Group to certify the balance of the Petroleum and Alcohol Account, relating to the period April 1, 1992 to June 30, 1998.

The Working Group concluded its certification process and recommended and the Company agreed to reduce the balance of the Petroleum and Alcohol Account by US\$ 106 and US\$ 405 during 2000 and 2001, respectively.

The changes in the Petroleum and Alcohol Account in the period July 1, 1998 to December 20, 2002 are subject to audits by the ANP, and in November 2002, the ANP recommended and the Company agreed to reduce the balance of the Petroleum and Alcohol Account by US\$ 29. The results of the audit will be the basis for the settlement of the account with the Federal Government.

After completion of the audit, the amount of the notes used to guarantee the debit balance in existence on June 30, 2003, or of the securitized credits, will be adjusted to the new amount calculated, as established in Provisional Measure No. 2181-45 of August 24, 2001.

Since the Company has implemented all recommendations made by the Working Group to the accounting for the Petroleum and Alcohol Account, the Company does not expect significant adjustments from the ANP audit.

**11 Financing**

**(a) Short-term debt**

The Company's short-term borrowings are principally from commercial banks and include import and export financing denominated in United States dollars, as follows:

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
Import Oil and equipment	286	352
Working capital	385	749
	<b>671</b>	<b>1,101</b>

The weighted average annual interest rates on outstanding short-term borrowings were 3.86% and 4.46% at December 31, 2002 and 2001, respectively.

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**(b) Long-term debt**

**(i) Composition**

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
<b>Foreign currency</b>		
Financial institutions	2,240	1,861
Suppliers credits	876	1,377
Notes	2,234	1,733
Securitization of receivables	900	900
Senior exchangeable notes (note 16c)	338	
	<u>6,588</u>	<u>5,871</u>
<b>Local currency</b>		
Debentures (related party)	188	276
Debentures	500	
BNDES (related party)	403	657
Others	35	44
	<u>1,126</u>	<u>977</u>
	7,714	6,848
Current portion of long-term debt	(727)	(940)
	<u>6,987</u>	<u>5,908</u>

**(ii) Composition of foreign currency debt by currency**

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
<b>Currencies</b>		
United States dollars	5,522	4,808
Japanese Yen	764	788
EURO (*)	297	271
Others	5	4
	<u>6,588</u>	<u>5,871</u>

(\*) The currencies French Franc, Italian Lira and Austrian Schilling were replaced by the Euro.



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**(iii) Maturities of the principal of long-term debt**

The long-term portion at December 31, 2002 becomes due in the following years:

2004	635
2005	411
2006	794
2007	1,339
2008 and thereafter	3,808
	6,987
	6,987

**(iv) Composition of long-term debt by annual interest rate**

Interest rates on long-term debt were as follows:

	As of December 31	
	2002	2001
<b>Foreign currency</b>		
6% or less	3,080	1,890
Over 6% to 8%	1,220	1,755
Over 8% to 10%	2,287	2,074
Over 10% to 15%	1	152
	6,588	5,871
<b>Local currency</b>		
6% or less	235	537
Over 6% to 8%	390	411
Over 8% to 10%		13
Over 10% to 15%	501	16
	1,126	977
	7,714	6,848

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**(v) Securitization of exports**

In December 2001, the Company signed contracts (Master Export Contract and Prepayment Agreement) with a special-purpose entity not related to PETROBRAS, PF Export Receivables Master Trust ( PF Export ). The purpose of these contracts is to securitize future export receivables from sales of fuel oil and other products purchased on the international market. The assignment of rights on future export receivables represents a liability of the Company, which will be settled by the transfer of the receivables to PF Export when they are generated.

As stipulated in the contracts, the Company assigned the rights to future receivables totaling US\$ 900 million to PF Export, and in return PF Export delivered to the Company US\$ 750 million in Senior Trust Certificates, maturing in 2010 and 2011 and bearing annual interest at rates between 6.60% and 6.75%. The US\$ 150 million difference represents a form of guarantee for the collection of the underlying receivables through Junior Trust Certificates held by the Company.

In order to guarantee that the exported volumes during the period of the transaction are sufficient to support the financial obligations, a hedge operation was entered into to set a minimum price for the crude oil at US\$ 14/barrel.

**(vi) Issue of senior notes**

On May 9, 2001, the Company through its wholly-owned subsidiary PIFCO, completed an offering of US\$ 450 9 7/8% Senior Notes due May 2008 and on July 6, 2001, the Company completed another offering of US\$ 600 9 3/4% Senior Notes due July 2011.

Both issuances are supported by a standby purchase agreement of the Company, and are general senior unsecured and unsubordinated obligations of the Company and will rank equal in right of payment with all other unsecured and unsubordinated obligations that are not expressly subordinated in right of payment. Any failure by PIFCO to make required payments of principal or interest will compel PETROBRAS to fulfill payment obligations.

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**(vii) Issue of non-convertible debentures**

During 2002, PETROBRAS issued the following book-entry, non-convertible debentures, without guarantee or preference, in a single issue:

<u>Issue date</u>	<u>Quantity</u>	<u>Period</u>	<u>Index</u>	<u>Interest</u>
August 29	750.000	10 years	IGPM	11% p.a.
October 4 and 23	775.000	8 years	IGPM	10.3% p.a.

The proceeds of these issuances were used for general corporate purposes.

**(viii) Guarantees and covenants**

Financial institutions abroad do not require guarantees from the Company. The financing granted by BNDES National Bank for Social and Economic Development is guaranteed by a lien on the assets being financed (vessels).

At December 31, 2002 and 2001, GASPETRO had secured certain debentures issued to finance the purchase of the transportation rights in the Bolivia/Brazil pipeline with 3,000 shares of its interest in TBG, a subsidiary of GASPETRO responsible for the operation of the pipeline.

The Company's debt agreements contain affirmative covenants regarding, among other things, provision of information; financial reporting; conduct of business; maintenance of corporate existence; maintenance of government approvals; compliance with applicable laws; maintenance of books and records; maintenance of insurance; payment of taxes and claims; and notice of certain events. The company's debt agreements also contain negative covenants, including, without limitation, limitations on the incurrence of indebtedness; limitations on the incurrence of liens; limitations on transactions with affiliates; limitations on the disposition of assets; limitation on consolidations, mergers, sales and/or conveyances; negative pledge restrictions; change in ownership limitations; ranking; use of proceeds limitations; and required receivables coverages.

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The Federal Government guarantees TBG's Multilateral Credit Agency debt, which had an outstanding balance of US\$ 487 and US\$ 506 at December 31, 2002 and 2001, respectively. During 2000, the Federal Government, the Company, TBG, PETROQUISA and Banco do Brasil S.A. entered into an agreement whereby the revenues of TBG will serve as a counter-guarantee to this debt until the debt has been extinguished.

PETROBRAS entered into standby purchase agreements in support of the obligations of its wholly-owned subsidiary under the note issuances in 2001 and 2002 and their respective indentures. PETROBRAS has the obligation to purchase from the noteholders any unpaid amounts of principal, interest or other amounts due under the notes and the indenture applies, subject to certain limitations, irrespective of whether any such amounts are due at maturity of the notes or otherwise.

**(ix) Lines of credit**

At December 31, 2002 and 2001, the Company had fully utilized all available lines of credit for the purchase of imports. Outstanding lines of credit at December 31, 2002 and 2001 were US\$ 2,771 and US\$ 1,729, respectively.

**12 Project Financings**

Since 1997, the Company has utilized project financing to provide capital for the continued development of the Company's exploration and production and related projects. The following summarizes the nature of the projects in progress at December 31, 2002 and 2001. The Company's arrangements related to these projects are considered leasing transactions. The Company's responsibility under these contracts is to complete the development of the oil and gas fields, operate the fields, pay for all operating expenses related to the projects and remit a portion of the net proceeds generated from the fields to fund the special purpose companies' debt and return on equity payments. At the end of each financing project, the Company will have the ability to purchase the leased or transferred assets from the special purpose company. Because the Company had commenced development or construction activities on each of these projects prior to completing the financing arrangement, and because of the Company's continuing involvement in these projects, the Company continues to reflect the assets related to the projects as a component of property plant and equipment and the related obligation as a component of project financing.

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	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
Marlim	635	713
Nova Marlim	508	933
Barracuda/Caratinga	1,481	773
Espadarte/Voador/Marimbá (EVM)	575	498
Cabiúnas	673	529
Albacora	123	303
Pargo, Carapeba, Garoupa and Cherne (PCGC)	44	84
	<u>4,039</u>	<u>3,833</u>
Current portion of project financings	(239)	(680)
	<u>3,800</u>	<u>3,153</u>

At December 31, 2002, the long-term portion of project finance becomes due in the followings years:

2004	591
2005	919
2006	793
2007	462
2008 and thereafter	1,035
	<u>3,800</u>

As of December 31, 2002 the amounts of commitments assumed arising from structured projects that will be reflected in future financial statements are presented as follows:

Cabiúnas	298
Barracuda/Caratinga	1,084
Albacora	25
Espadarte/Voador/Marimba (EVM)	11
	<u>1,418</u>



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*Marlim.* On December 14, 1998, the Company entered into a consortium agreement with Companhia Petrolífera Marlim (CPM), a single purpose entity formed in November 1998 by a group of international financial institutions for the sole purpose of raising US\$ 1,500 for the expansion and continued development of the Marlim oil field. In December 1999, CPM raised US\$ 200 through a medium term note program, and an additional US\$ 300 in 2000. Upon closing of the consortium agreement, the Company sold certain assets to CPM, who leased them back to the Company. Effective June 30, 1999 PETROBRAS conveyed its remaining assets in the Marlim field to CPM, also leased them back to the Company. Additionally, in June 1999, the shareholders of CPM and the Company entered into a Stock Option Agreement granting to the Company a call option at the end of the lease and to the shareholders of CPM a put option to the Company in the case of default.

*Barracuda/Caratinga.* On June 23, 2000 the Company completed its project finance negotiations with the Barracuda Caratinga Leasing Company B. V. (BCLC), a special purpose entity formed by a group of international financial institutions for the sole purpose of raising US\$ 2,500 for the development of the Barracuda and Caratinga oil and gas fields located in the Campos Basin. Permanent funding for this project has been raised from two governmental institutions (Japan's Bank of International Cooperation - JBIC and the BNDES) and from a syndicate of commercial banks. In conjunction with this project, the Company will contribute US\$ 1,035 of drilling services through a drilling services contract signed with the Halliburton Company.

The company Kellog Brown & Root (KBR), belonging to the Halliburton Group, contracted as the prime contractor for all the work to construct the assets of the Barracuda/Caratinga Project, has publicly announced its intention to seek protection from its creditors under the bankruptcy laws of the United States with respect to its asbestos business, which does not directly impact the remaining businesses.

The Company does not expect losses and/or stoppages to the project as a result of the Chapter 11 filing of KBR, since the Barracuda/Caratinga project stipulates a package of guarantees, including bank guarantees, provided by KBR and Halliburton to the Company to cover possible default by the contractor in exercising its functions, in addition to a performance bond insurance.

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*Espadarte/Voador/Marimbá (EVM).* On June 23, 2000, the Company completed its project finance negotiations with the EVM Leasing Corporation (EVMLC), a special purpose entity formed by a group of international financial institutions for the sole purpose of raising US\$ 1,600 for the development of the Espadarte, Voador and Marimbá oil and gas fields located in the Campos Basin. Permanent funding for the EVM project was provided by a syndicate of international financial institutions, Japanese trading companies, JBIC and BNDES. Bridge financing in the amount of US\$ 300 for this project was prepaid in December 1999. Upon closing of the agreement, the Company sold previously identified oil and gas assets to EVM, who leased them back to the Company.

*Cabiúnas.* On March 1, 2000, the Company completed its project finance negotiations with the Cayman Cabiúnas Investment Co. Ltd., a special purpose entity formed by the Mitsui and Sumitomo banks for the sole purpose of raising US\$ 850 for the expansion of the Cabiúnas Complex located in Macaé, in the state of Rio de Janeiro. Permanent financing was provided by JBIC, a syndicate of commercial banks led by the Bank of Tokyo-Mitsubishi and the special purpose company's equity investors.

*Albacora.* During 2000, the Company finalized negotiations for two separate financing projects related to the Albacora oil field located in the Campos basin. On November 28, 2000, the Company completed its negotiations related to a project financing arrangement with the Albacora Japan Petroleum Limited Company (AJP), a special purpose corporation formed in December 1998 for the sole purpose of providing financing for the continued development of the Albacora oil field. AJP's operations commenced in December 2000 with the purchase of certain oil and gas assets from the Company. AJP provided these assets exclusively to the Company in return for minimum proceeds of US\$ 208 to be generated from the field's production. Permanent financing was provided by JBIC, the Japan National Oil Company (JNOC) and certain Japanese trading companies. In addition, in December 2000, PETROS, the Company's pension plan, agreed to provide funding for the development of this oil field. During 2000, PETROS advanced US\$ 240 for the continued development of the field, and this amount has been classified together with the AJP financing transaction. AJP does not have any further funding needs.

*Pargo, Carapeba, Garoupa, Cherne and Congro (PCGC).* The PCGC is an offshore development project in the Pargo, Carapeba, Garoupa, Cherne and Congro fields. The project is a secondary extraction project using water-injection technology to reestablish the appropriate level of pressure in the reservoirs to maximize the recovery of oil and gas in these fields. In addition, the PCGC project includes equipment for new oil reserves in the Congro field. Management estimates total costs of the PCGC project to be US\$ 134 million.

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*Nova Marlim.* On December 6, 2001, the Company entered into a consortium agreement with Nova Marlim Petróleo S.A., a special purpose entity formed by a group of international financial institutions for the sole purpose of raising US\$ 933 for the complementary development and production optimization of the Marlim oil field.

**13 Capital Leases**

The Company leases certain offshore platforms, vessels and thermoelectric plants which are accounted for as capital leases. At December 31, 2002, these assets had a net book value of US\$ 2,499 (US\$ 1,886 in 2001).

The following is a schedule by year of the future minimum lease payments at December 31, 2002:

2003	471
2004	405
2005	360
2006	313
2007	298
Thereafter	898
	<hr/>
Estimated future lease payments	2,745
Less amount representing interest at 6.187% to 12.0%	(479)
Less amount representing executory costs	(10)
	<hr/>
Present value of minimum lease payments	2,256
Less current portion	(349)
	<hr/>
Long-term portion	1,907
	<hr/>

**14 Employees Postretirement Benefits and Other Benefits**

The Company sponsors a contributory defined benefits pension plan, Fundação PETROBRAS de Seguridade Social - PETROS, which covers substantially all of its employees. The principal objective of PETROS is to supplement the social security pension benefits of the employees of PETROBRAS, its subsidiaries and non-consolidated companies, other companies and PETROS itself. The Company's funding policy is to contribute to the plan annually the amount determined by actuarial calculations. Contributions are intended to provide not only for benefits attributed to service to date but also for those expected to be earned in the future.

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On October 16, 2000, PETROS established a defined contribution plan for the employees of TRANSPETRO for which contributions will be made at 5.32% of that subsidiary's payroll to match employee contributions.

Plan assets are invested primarily in equity securities, government securities and properties, including the following securities of related parties:

	<b>As of December 31</b>	
	<b>2002</b>	<b>2001</b>
PETROBRAS common shares	4	21
PETROBRAS preferred shares	35	47
Government controlled companies	22	21
Government securities	1,633	1,823
Securities of other related parties	56	193
	<u>1,750</u>	<u>2,105</u>

In addition, PETROS has agreed to provide certain financing for the continued development of the Albacora oil and gas field located in the Campos Basin (See Note 12).

The Company also provides certain postretirement health care benefits for its employees and their dependents. The Company contributes to the plan an amount necessary to cover employee benefits for the year. Accordingly, the plan is unfunded.

According to Constitutional Amendment No. 20, which precludes state owned companies from making additional contributions to pension plans, computation of deficits in accordance with the actuarial method applied by the plan in its records maintained to satisfy the Brazilian regulatory agency (which differs from the method defined in SFAS 87), must be equally shared between the sponsors and the participants.

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The funded status of the plans at December 31, 2002 and 2001, based on the report of the independent actuary, and amounts recognized in the Company's balance sheets at those dates, are as follows:

	As of December 31			
	2002		2001	
	Pension benefits	Health care benefits	Pension benefits	Health care benefits
<b>Change in benefit obligation:</b>				
Benefit obligation at beginning of year	6,460	1,948	6,711	2,019
Service cost	54	21	73	31
Interest cost	255	144	339	192
Actuarial loss	975	479	842	96
Benefits paid	(311)	(52)	(450)	(72)
Gain (loss) on translation	(2,218)	(667)	(1,055)	(318)
	<u>5,215</u>	<u>1,873</u>	<u>6,460</u>	<u>1,948</u>
<b>Change in plan assets:</b>				
Fair value of plan assets at beginning of year	4,299		3,310	
Actual return on plan assets	754		51	
Company contributions	377	52	1,810	72
Employee contributions	72		99	
Benefits paid	(311)	(52)	(450)	(72)
Loss on translation	1,476		(521)	
	<u>3,715</u>	<u></u>	<u>4,299</u>	<u></u>
<b>Reconciliation:</b>				
Funded status	(1,500)	(1,873)	(2,161)	(1,948)
Unrecognized actuarial loss	2,109	813	2,859	539
Unrecognized transition obligation	61		187	
	<u>670</u>	<u>(1,060)</u>	<u>885</u>	<u>(1,409)</u>
<b>Amounts recognized in the balance sheet consist of:</b>				
Employees' postretirement benefits	(1,452)	(1,060)	(2,088)	(1,409)
Unrecognized pension obligations	61		187	
Accumulated other comprehensive Income	2,061		2,786	
	<u>670</u>	<u>(1,060)</u>	<u>885</u>	<u>(1,409)</u>



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As discussed in Note 5(b), on December 30, 2002 and December 28, 2001, the Company transferred to PETROS NTN-B notes with a fair value of US\$ 388 and US\$ 1,475 respectively.

For measurement purposes, a 5.82% annual rate of increase in the per capita cost of covered health care benefits was assumed upon implementation of SFAS 106. The annual rate was assumed to decrease to 2.7% after 50 years.

Net periodic benefit cost includes the following components:

	Years ended December 31			
	2002		2001	
	Pension benefits	Other benefits	Pension benefits	Other benefits
Service cost-benefits earned during the year	54	21	73	31
Interest cost on projected benefit obligation	255	144	339	192
Expected return on plan assets	(164)		(207)	
Amortization of initial transitory obligation	74		134	
Gain (loss) on translation	(13)	(51)	(42)	24
Recognized actuarial loss	154		126	
	360	114	423	247
Employee contributions	(71)		(99)	
Net periodic benefit cost	289	114	324	247

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Assumptions used in 2002 and 2001 for both plans are summarized as follows:

	2002		2001	
	Pension benefits	Other benefits	Pension benefits	Other benefits
Discount rates	Inflation: 5% + 6%	Inflation: 5% + 6%	Inflation: 5% + 6%	Inflation: 5% + 6%
Rates of increase in compensation levels	Inflation: 5% + 2%	Inflation: 5% + 2%	Inflation: 5% + 2%	Inflation: 5% + 3%
Expected long-term rate of return on assets	Inflation: 5%+ 6%		Inflation: 5%+ 6%	

The determination of the expense and liability relating to the Company's pension plan involves the use of actuarial assumptions. These include estimates of future mortality, withdrawal, changes in compensation and discount rate to reflect the time value of money as well as the rate of return on plan assets. These assumptions are reviewed at least annually and may differ materially from actual results due to changing market and economic conditions, regulatory events, judicial rulings, higher or lower withdrawal rates or longer or shorter life spans of participants. As of December 31, 2002, the Company decided to change the assumptions related to the estimate of future mortality, adopting a new mortality table (GAM-71) more suitable for the evolution observed in the average life expectancy of the population made up of Company retired employees.

The Company, and its actuarial consultants are currently reviewing the basis for estimating the assumed discount rate in light of the recent development of a secondary bond market in Brazil for high-grade long-term government securities. As insufficient evidence is available at December 31, 2002 to support a change, the Company chose not to change the discount rate assumptions. In the event the rate of return offered by these securities (nominal rate of 10.6% at December 31, 2002) is deemed to be consistent with the requirements of SFAS No. 87, and subsequent interpretations, for measurement of defined benefit obligations, the Company may adopt different assumptions in the future, which may have a significant impact on the amount of pension liability and expense.

Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement health care plans. A one-percentage-point change in assumed health care cost rates would have the following effects:

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	<u>One percentage point-increase</u>	<u>One percentage point-decrease</u>
Effect on total of services and interest cost component	50	(38)
Effect on postretirement benefit obligation	355	(274)

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**PETROBRAS VIDA**

In May 2001, the Board of Directors of PETROBRAS approved the creation of a mixed social security plan, for current and new employees, based on a defined contribution formula for programmable benefits and a defined benefit formula for risk benefits. The new plan, PETROBRAS VIDA, was also approved by the Coordination and Control Department of State Companies (DEST) and by the Supplementary Social Security Secretariat (SPC) in October 2001, and was ratified by PETROBRAS' Board of Directors.

The migration process of participants in the current plan to PETROBRAS VIDA has been temporarily suspended according to the Federal Justice decision. Therefore the impact of migration to the new plan will only be computed and recognized in the Company's financial statements in accordance with the requirements of SFAS No. 88 - Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits, when the issues being litigated have been resolved and the migration process finalized.

**15 Stockholders' Equity**

The Company's subscribed and fully paid-in capital at December 31, 2002 and 2001 consisted of 634,168,418 common shares and 451,935,669 preferred shares. The preferred shares do not have any voting rights and are not convertible into common shares and vice-versa. Preferred stockholders have priority in the return of capital.

The Extraordinary Stockholders' Meeting, held jointly with the Stockholders' General Meeting on March 22, 2002, approved the increase of the Company's capital stock from US\$ 4,834 to US\$ 6,220 with the capitalization of the revenue reserve constituted in prior years, without issuing new shares.

During the same meeting, the PETROBRAS shareholders approved a reform of the Company's bylaws to adjust them to the modifications introduced by Law No. 10303, of October 31, 2001. The principal change introduced by the new bylaws include an amendment that requires preferred shares to be given priority in the case of repayment of capital and the receipt of dividends, of at least 3% of the book value of the shares or 5% calculated on the portion of capital represented by this class of shares, whichever is larger, and participation on an equal footing with common shares in capital increases resulting from the incorporation of reserves and income.

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On June 10, 2002 at an Extraordinary Shareholders Meeting, the Company's shareholders approved an amendment to the Company's bylaws, to adjust them to the modifications introduced by Law No. 10438 of April 26, 2002. This amendment authorized a change in the corporate purpose of the Company, to include activities related with energy and its sale, in addition to providing more flexible means of borrowings. The Company is also authorized to increase capital, irrespective of an amendment to the bylaws, as a result of a resolution by the Board of Directors, up to US\$ 8.5 billion, by means of issuing up to 200 million preferred shares.

In a Special Meeting of Preferred Shareholders held on June 10, 2002, the Company's shareholders ratified a resolution taken by the Extraordinary Shareholders' meeting authorizing the issue of preferred shares, without maintaining proportion with common shares.

On December 20, 2002, the Board of Directors approved the Company's share buyback program, as facilitated by its bylaws, with the main purpose of, defending the price of its stock at times when it is undervalued by the market. The definition and implementation of the share buyback program is not intended to jeopardize the investment program or replace the payment of dividends by the Company.

On January 29, 2003, the Board of Directors of the Company, approved the issue of 9,866,828 preferred shares of PETROBRAS in connections with the public offer by the Company to acquire publicly traded shares of BR, at an issue price of US\$ 12.76 per share, under the terms of the capital increase approved during the meeting of the Board of Directors of PETROBRAS held on November 7, 2002. As a result, the capital of the Company increased by US\$ 126.

In addition, the Board of the Company is proposing to the Extraordinary Shareholders' Meeting to be held together with the General Shareholders' Meeting on March 27, 2003, an increase in the Company's capital by capitalizing revenue reserves accrued during previous years, to the amount of US\$ 878 without issuing new shares, in accordance with Art. 169, paragraph 1 of Law No. 6404/76.

Current Brazilian law requires that the Federal Government retain ownership of 50% plus one share of the Company's voting stock.

On February 22, 2001, the Securities and Exchange Commission declared effective the registration of the Company's ADR level II program for preferred stock in replacement of the existing ADR level I program. Since then, these shares are being traded on the New York Stock Exchange (NYSE), under the symbol PBRA.

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Through a public offering of PETROBRAS preferred stock in July 2001, the BNDES sold 41,381,826 of the Company's preferred shares in the market, equivalent to 9% of total preferred stock and 4% of total capital.

PETROBRAS obtained approval from the Brazilian Securities Commission - CVM and the Brazilian Central Bank - BACEN to launch a Depository Receipt Program - DR on the Spanish Stock Exchange - LATIBEX as of July 9, 2002, in connection with the Company's existing common and preferred shares.

**(i) Dividends**

In accordance with the Company's by-laws, holders of preferred and common shares are entitled to a mandatory dividend of 25% of annual net income as adjusted under Brazilian Corporate Law. In addition, the preferred stockholders have priority in the receipt of an annual dividend of at least 3% of the book value of the shares or 5% of the paid-in capital in respect of the preferred shares as stated in the statutory accounting records. As of January 1, 1996 amounts attributed to stockholders as interest (see below) are included in the computation of the mandatory dividend. Dividends are paid in Brazilian reais.

Brazilian corporations are permitted to attribute interest on stockholders' equity, which may either be paid in cash or be used to increase capital stock. The calculation is based on stockholders' equity amounts as stated in the statutory accounting records and the interest rate applied may not exceed the Taxa de Juros de Longo Prazo (long-term interest rate or the TJLP) as determined by the Brazilian Central Bank. Such interest may not exceed the greater of 50% of net income or 50% of retained earnings plus revenue reserves. Interest on stockholders' equity, is subject to withholding tax at the rate of 15%, except for untaxed or exempt stockholders, as established by Law No. 9249/95. These amounts will be monetarily restated as from December 31, 2002 up to the initial date of payment, according to the variation in the SELIC rate. The Company paid US\$ 416 in interest on stockholders' equity during the year ended December 31, 2002 (2001 - US\$ 1,301 - 2000 - US\$ 251).

The dividends proposal submitted by the Board of Directors for approval at the General Stockholders' meeting to be held on March 27, 2003, amounting to US\$781, include the portion of interest on stockholders' equity approved by the Board of Directors on October 31, 2002, amounting to US\$ 307, which was made available to shareholders on January 13, 2003, corresponding to US\$ 0.28 per common and preferred share, based on the shareholders of record as of November 12, 2002, and also includes the portion of interest on equity approved by the Board of Directors on January 31, 2003, amounting to US\$ 310, corresponding to US\$ 0.29 per common and preferred share, to be made available based on the shareholders of record as of March 27, 2003, on a date to be established by the general Shareholders' Meeting for payment of the balance of the dividends for the 2002 financial year.

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Brazilian law permits the payment of dividends only from retained earnings as stated in the statutory accounting records. At December 31, 2002, the Company had appropriated all such retained earnings.

In addition, at December 31, 2002, the following reserves in appropriated retained earnings may be used for dividend distribution purposes, if so approved by the stockholders:

Undistributed earnings reserve	4,778
Statutory reserve	164
	<u>          </u>
	4,942
	<u>          </u>

A withholding tax of 15% is payable on distributions of profits earned from January 1, 1994 through December 31, 1995. No withholding tax is payable on distributions of profit earned since January 1, 1996.

**(ii) Basic and diluted earnings per share**

Basic and diluted earnings per share amounts have been calculated as follows:

	<u>2002</u>	<u>2001</u>	<u>2000</u>
Net income	2,311	3,491	5,342
Less priority preferred share dividends	(77)	(117)	(139)
Less common share dividends, up to the priority preferred shares dividends on a per-share basis	(107)	(164)	(195)
	<u>          </u>	<u>          </u>	<u>          </u>
Remaining net income to be equally allocated to common and preferred shares	2,127	3,210	5,008
	<u>          </u>	<u>          </u>	<u>          </u>
Weighted average number of shares outstanding:			
Common/ADS	634,168,418	634,168,418	634,168,418
Preferred/ADS	451,935,669	451,935,669	451,935,669
Basic and diluted earnings per share			
Common/ADS and Preferred/ADS	2.13	3.21	4.92

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**(iii) Capital reserves**

**AFRMM**

Relates to the Merchant Marine (AFRMM) freight surcharges levied in accordance with relevant legislation. These funds are used to purchase, enlarge or repair vessels of the Company's transport fleet.

**Fiscal incentive reserve**

This reserve consists of investments in tax incentives in the Northeast Investment Fund (FINOR), arising from allocations of part of the Company's income tax.

**(iv) Appropriated retained earnings**

Brazilian Law and the Company's by-laws require that certain appropriations be made from retained earnings to reserve accounts annually. The purpose and basis of appropriation to such reserves is as follows:

**Legal reserve**

This reserve is a requirement for all Brazilian corporations and represents the annual appropriation of 5% of net income as stated in the statutory accounting records up to a limit of 20% of capital stock. The reserve may be used to increase capital or to compensate for losses, but may not be distributed as cash dividends.

**Undistributed earnings reserve**

This reserve is established in accordance with Article 196 of Law No. 6,404/76 to fund the Company's annual investment program. For the year ended December 31, 2001, the Company's management retained US\$ 2,238 from that year's income to fund the Company's capital expenditure budget for 2002. This proposal was approved at the Stockholders' General Assembly held on March 22, 2002.

The proposal for appropriation of income for the year ended December 31, 2002 includes a retention of earnings in the amount of US\$ 1,834, of which US\$ 1,831 relates to net income for the year and US\$ 3 to the remaining balance of retained earnings, to be approved by the Stockholders' General Meeting to be held on March 27, 2003. This proposal is intended to cover partially the annual investment program established in the capital budget for 2003.

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**Statutory reserve**

This reserve is provided through an amount equivalent to a minimum of 0.5% of subscribed and fully paid in capital at year-end. The reserve is used to fund the costs incurred with research and technological development programs. The accumulated balance of this reserve cannot exceed 5% of the capital stock, according to Article 55 of the Company's by-laws.

**16 International Acquisitions**

**(a) Exchange Agreement with Repsol YPF**

The final Agreement for the business combination between the Company and REPSOL-YPF was signed and became effective on December 20, 2001. The agreement was initiated prior to June 30, 2001 and therefore accounted for as a purchase under APB 16 Business Combinations.

In order to make the transaction viable, the Company transferred the assets of the Alberto Pasqualini Refinery to its subsidiary REFAP S.A. as a capital contribution on February 5, 2001, and its shares in the capital of REFAP S.A. to its subsidiary DOWNSTREAM PARTICIPAÇÕES S.A., which transferred 30% of its shares in the capital of REFAP S.A. to its subsidiary REFISOL S.A. on February 6, 2001.

Under the agreement the Company received 100% of the quotas in the company 5283 Participações Ltda, the owner of 99.6% of the stock of the oil company Eg3 in Argentina, comprising a refinery with the capacity to process 30,500 barrels/day of oil, approximately 700 gas stations, an asphalt and membrane plant, a terminal and a lubricants plant. In exchange, the Company assigned the following assets to REPSOL-YPF:

- (i) 100% of REFISOL S.A., holder of 30% of the stock of REFAP S.A, owner of the Alberto Pasqualini Refinery in Rio Grande do Sul.
- (ii) 100% of Postos S.A., a subsidiary of BR, holder of the contractual rights to supply fuel to 234 gas stations in the Midwest, Southern and Southeastern regions (totaling 40,000 m3/month), in addition to associated assets assigned to the gas stations.
- (iii) 10% of the concession rights for exploration of the Albacora Leste Field, located in the Campos Basin.

The book value of the assets transferred to REPSOL-YPF by means of the transaction was US\$ 60.

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The Eg3 acquisition was accounted for using the purchase method of accounting and, accordingly, Eg3's results of operations have been included in our consolidated financial statements commencing on the effective date of the acquisition. The purchase price for the Eg3 acquisition was initially allocated based on preliminary estimates of the fair market value of the assets acquired and the liabilities assumed as of the acquisition date. The estimated fair value of the net assets acquired from Eg3 was US\$ 560. The gain of US\$ 500 that resulted was included in other non-operating income. The purchase price allocation was initiated in 2001. The initial purchase price allocated for the Eg3 acquisition resulted in no goodwill.

The estimated fair value of the net assets of Eg3 were based on undiscounted future cash flow models of Eg3 generated by an independent third party. These models took into consideration the effect of the bilateral contingent clauses are intended to protect the Company's margins from any unfavorable operating results in Argentina as a result of Argentina's current economic crisis.

On June 13, 2001, a popular action was filed with the first Federal Court in the State of Rio Grande do Sul challenging the business combination, and the judge provisionally ruled that the transaction should not be finalized until a subsequent manifestation by the court had been made. However, the ruling did not prohibit carrying out preliminary measures before executing the transaction. In a decision dated August 13, 2001, the federal judge responsible for the popular action denied a request for an injunction to prevent the transaction from being closed. As a result of this ruling the transaction could be closed, while the popular action is following its normal course in the courts.

**(b) Acquisition of Petrolera Santa Fe**

On October 24, 2002, the Company completed the acquisition of 100% of Petrolera Santa Fe Southern Cone, Inc., a holding company incorporated in the British Virgin Islands, parent company of Petrolera Santa Fe S.R.L (Santa Fe), an Argentine oil and gas exploration company, for US\$ 90, paid in cash on the same date. The purchase price was less than the estimated fair market value of the net assets acquired, resulting in a reduction in the acquisition value assigned to Santa Fe's long-lived assets.

In 2002, Santa Fe produced approximately 10.2 thousand barrels of oil equivalents per day.

**(c) Perez Companc S.A.**

On October 17, 2002, the Company entered into an agreement to acquire the stock control of Perez Companc S.A. PECOM and part of the stock of PECOM's subsidiary, Petrolera Perez Companc S.A.

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Under the Stock Purchase Agreement, the Company received 58.62% (1,249,716,746 shares) of the outstanding shares of PECOM and 39.67% (198,355 shares) of the outstanding shares of Petrolera Perez Companac S.A., for the equivalent of US\$ 689 and US\$ 50, respectively, in cash, and deposited the equivalent of US\$ 338 in seller's notes issued by PIFCO into an escrow account. Despite the Company having agreed to acquire majority control of Perez Companac S.A., assuming the management of the companies and maintaining its intention to retain the investment, in accordance with Argentinean legislation, the Company is required to obtain regulatory approval for the transaction. All required documents were filed with the antitrust agency of Argentina (CNDC - Comisión Nacional de Defensa de la Competencia).

If an unfavorable position from the regulatory agency of Argentina is received or if no ruling is issued by the CNDC within 12 months of the signing of the purchase agreement, the transaction may be reversed, depending on the extent of the resolutions proposed or the disposition of assets recommended by the CNDC.

As stipulated in the Stock Purchase Agreement, if the transaction is reversed, the Company will transfer the shares back to the sellers and the latter will return the full amount received in cash and transfer back to the Company the rights to the notes issued by PIFCO. In order to guarantee the return of the cash distributed to PECOM and Petrolera Perez Companac S.A. in the event of a reversal of the transaction, obligations by the sellers, the Company, received an irrevocable letter of credit issued by Deutsche Bank in the amount of US\$ 738.

The financial statements of PECOM have not been consolidated as of December 31, 2002, due to the possibility that the acquisition will be reversed. Upon receiving approval of the operation by the CNDC, the financial statements of PECOM and Petrolera Perez Companac S.A. will be accounted for using the purchase method of accounting and will also be included in the consolidated PETROBRAS financial statements.

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PECOM has activities in Argentina, Bolivia, Brazil, Equador, Peru, Venezuela and the United States.

**17 BR**

On November 7, 2002, the Board of Directors of the Company approved a public offer by the Company to acquire the publicly traded shares of Petrobras Distribuidora S.A. BR, to cancel its quoted company registration by means of an exchange for preferred stock to be issued by the Company.

In addition the Board of Directors approved the valuation appraisal of BR that determined the value of R\$ 45,40 (US\$ 16.66) for each 1,000 share lot of BR stock, the valuation appraisal by the Company that established a value of R\$ 64,90 (US\$ 16.66) for each share issued by the Company together with the swap ratio of the Company and BR shares at the rate of 0.7 PETROBRAS shares for 1,000 BR shares, which will be agreed together with a premium, defined by the specific formula.

On January 29, 2003, a public auction was held in which implementation of the condition for canceling the registration of the quote company of BR was verified. On February 5, 2003, CVM cancelled the registration of the quoted company of BR.

**18 Commitments and Contingencies**

PETROBRAS is subject to a number of commitments and contingencies arising in the normal course of its business. Additionally, the operations and earnings of the Company have been, and may be in the future, affected from time to time in varying degrees by political developments and laws and regulations, such as the Federal Government's continuing role as the controlling shareholder of the Company, the status of the Brazilian economy, forced divestiture of assets, imports and exports, price controls, tax increases and retroactive tax claims, and environmental regulations. Both the likelihood of such occurrences and their overall effect upon the Company are not predictable.

**(a) Financial Commitments and Guarantees**

The Company currently has several contracts to purchase crude oil, diesel fuel and other oil products, which require the Company to purchase a minimum of approximately 180,000 barrels per day at respective current market prices.

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PETROBRAS provided guarantees to the ANP for the minimum exploration program defined in the concession contracts for exploration areas, totaling US\$ 652. Out of this total, US\$ 576 represents a pledge on the oil to be extracted from previously identified fields already in production, for areas in which the Company had already made commercial discoveries or investments at the time where Law No. 9478 of August 6, 1997 came into force. For areas whose concessions were obtained by bidding from the ANP, PETROBRAS has given guarantees totaling US\$ 76 through December 31, 2002.

PETROBRAS has guaranteed that it will purchase specified volumes of natural gas that run through TBG.

In 1993, the Company signed a contract with Yacimientos Petrolíferos Fiscales Bolivianos, the Bolivian state oil company for the purchase of natural gas. Under this contract, the Company is required to purchase all of the natural gas transported through the Bolivia/Brazil natural gas pipeline over a 20 year term at contract prices ranging from US\$ 1.07 per MMBTU to US\$ 1.17 per MMBTU, based upon throughput. The northern section of the pipeline, which links Bolivia to the State of São Paulo, started operations in July 1999 and the southern section, which links São Paulo to Porto Alegre, started operations on March 31, 2000. The pipeline achieved an average throughput of 11.4 million cubic meters per day during 2002.

The Company has exclusive supply contracts with certain service stations. These contracts are typically for seven years and require the Company to sell product at market prices.

**(b) Litigation**

**(i) Judicial actions**

The Company is a defendant in numerous legal actions arising in the normal course of business. Based on the advice of its internal legal counsel and management's best judgment, the Company has recorded accruals in amounts sufficient to provide for losses that are considered probable and reasonably estimable.

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The following presents these accruals by the nature of the claim:

	<u>As of December 31</u>	
	<u>2002</u>	<u>2001</u>
Labor claims	13	9
Tax claims	13	10
Civil claims	24	81
	<u>50</u>	<u>100</u>
Contractual contingencies – thermoelectric plants	205	
Contingencies for joint liability	113	
	<u>368</u>	<u>100</u>
Total	<u>368</u>	<u>100</u>

On May 28, 1981, Kallium Mineração S.A. brought an action against Petromisa, a former subsidiary of PETROBRAS, in the Federal Court of the State of Rio de Janeiro alleging damages of approximately US\$ 450 relating to the rescission of a contract to develop a potassium salt mine. On August 10, 1999, the trial judge dismissed most of the plaintiff's claims, and ordered the Company to indemnify the plaintiff only with respect to the preliminary research expenses it had incurred. Kallium Mineração S.A. and the Company have appealed the decision. Based on the opinion of legal counsel, management considers the risk of loss with respect to this lawsuit to be remote.

On August 8, 1993, Indústria Bahiana de Adubos, Importação e Exportação Ltda. filed a lawsuit against us in the state court of Bahia claiming approximately US\$ 129 in damages. The claim is based upon the Company's refusal to sell fertilizers to the plaintiff due to the plaintiff's payment default under prior contracts with the Company. The plaintiff claims that such a refusal harmed its financial condition and, ultimately, caused its bankruptcy. On December 9, 1993, the trial court decided in favor of the plaintiff. However, the Company appealed and the decision was reversed by the State Court of Appeals. Subsequently, the plaintiff filed a special appeal, which was also found to be without grounds on June 25, 2002 by the 3rd Panel of the Appeals Court, which is pending publication. Based on the opinion of its legal advisers, the Company management does not expect an unfavorable ruling in this case. Therefore no provision was established for this contingency.

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On January 14, 1997, a decision was handed down by the state trial court of Rio de Janeiro that held the Company liable to Petroquisa for damages in the amount of US \$3,406 for a derivative lawsuit brought against the Company by Porto Seguro, a minority shareholder of Petroquisa claiming that the Company should indemnify that subsidiary for supposed losses caused by the privatization of its investments in subsidiaries and associated companies, alleging abusive exercise of its controlling power. The Company filed an appeal with the State Court of Rio de Janeiro, which issued a favorable decision for Petrobras on February 11, 2003.

An appeal can be made against the decision handed down by the State Court of Rio de Janeiro before the case be judged by the State Appeals Court (special appeal) and the Federal Appeals Court (extraordinary appeal). Based on the opinion of its legal advisers, the Company does not expect to obtain an unfavorable ruling in this case.

The Company was sued by several oil product distributors alleging that the Company does not pass on to state governments the Value-added Tax on Sales and Services (ICMS) retained by the Company according to the legislation at the time of selling fuel. These suits were filed in the states of Goiás, Tocantins, Bahia, Pará, Maranhão and in the Federal District.

Collectively, these claims totaled approximately US\$ 394 at December 31, 2002 of which approximately US\$ 32 was effectively withdrawn from the Company's accounts as a result of judicial rulings of advance relief.

The Company, with the support of the state and federal authorities, has succeeded in impeding the execution of other withdrawals, and is making all efforts possible to obtain reimbursement of the amounts that it believes were improperly withdrawn from its accounts.

On February 21, 2002, a Brazilian court published a ruling in favor of the Rio de Janeiro State Federation of Fishermen in their lawsuit against the Company stemming from the oil spill that occurred on January 18, 2000 in the Guanabara Bay (see Note 17(c)). The Federation of Fishermen initially requested damages for a variety of claims, including consequential damages and the infliction of emotional distress, in the amount of approximately US\$ 224.

A decision was handed down on February 7, 2002 which ruled the claim partially without grounds, rejecting pain and suffering, and required the Company to pay compensation for material damages and loss of profit to be calculated at the award phase.

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Both parties appealed against the decision and on October 8, 2002 the Rio de Janeiro appeals court partially rejected the plaintiffs appeals and partially sustained the appeal of the Company.

The decision handed down by the appeals court implies in practice that an award was made to pay compensation to a relatively small number of fisherman, bearing in mind that settlements were made with almost all members of the plaintiff that work in the areas affected by the accident. Based on the opinion of its legal advisers, Company management believes that this case may result in a loss, but any adverse ruling would be in an amount well below the claim for compensation.

The São Paulo tax authorities filed a tax suit against the Company, alleging that the Company did not pay ICMS levied on interstate sales of naphtha. However, during the period that according to the State of São Paulo, the Company should have paid the ICMS, the Company was subject to a different tax regime (federal) on these sales, and for this reason qualified for a tax exemption. The value of the matter in controversy is US\$ 60. There is no guarantee that the final result of the legal case will be favorable to the Company, but even in the case of an unfavorable ruling, Company management does not believe that the award could have a materially negative effect on the financial and equity position of the Company.

At December 31, 2002 and December 31, 2001, in accordance with Brazilian law, the Company had paid US\$ 290 and US\$ 337 into federal depositories to provide collateral for these and other claims until they are settled. These amounts are reflected in the balance sheet as restricted deposits for legal proceedings and guarantees.

**(ii) Commitments undertaken by the Energy Segment**

The Company has commitments for the purchase of energy, supply of gas and reimbursement of operating expenses with thermoelectric plants included in the Federal Government's Priority Thermoelectric Energy Program, summarized as follows:

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**Thermoelectric Plants of the Merchant type**

The Company has a commitment to make contingent payments for the thermoelectric plants Macaé Merchant, Eletrobolt and Termoeceará, 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 mentioned. On December 31, 2002, the total commitment was approximately US\$ 1.6 billion for the period from 2003 and 2007.

**Thermoelectric Plants with energy purchase commitments**

In addition, the Company has a commitment to supply natural gas for the production of energy at the thermoelectric plants Termorio, Termobahia, UEG Araucária, FAFEN Energia, Ibititermo, Três Lagoas, UTE Canoas and Nova Piratininga, and also to acquire part or all the energy generated by these plants at a price that remunerates invested capital. As of December 31, 2002, the total commitment was approximately US\$ 10.3 billion for the period from 2003 to 2007.

**Contingent financial exposure**

As a result of these commitments and based on the exposure and negotiation of contracts to sell energy in progress, the Company's Board of Directors has decided to recognize a provision for contingencies for probable losses reasonably estimable through December 31, 2003 of US\$ 205, which is recorded in other current liabilities.

**(iii) Notifications from the INSS - Joint liability**

The Company received various tax assessments related to social security charges as a result of irregular presentation of documentation required by the INSS, to eliminate its joint liability in contracting civil construction and other services, stipulated in paragraphs 5 and 6 of article 219 and paragraphs 2 and 3 of article 220 of Decree 3048/99.

The Company made a provision for this contingency amounting to US\$ 105, considering the chances of success in its defense filed against the administrative processes with the INSS to be remote.

Internally, procedures were revised to improve the inspection of contracts and correctly demand the presentation of the documents stipulated in the legislation to substantiate the payment of the INSS due by contractors.

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Despite the internal procedure mentioned above, PETROBRAS is analyzing each of the assessments received in order to recover the amounts.

**(c) Environmental Matters**

The Company is subject to various environmental laws and regulations. These laws regulate the discharge of oil, gas or other materials into the environment and may require the Company to remove or mitigate the environmental effects of the disposal or release of such materials at various sites. Management believes that payments required to comply with these laws will not have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

On January 18, 2000, a pipeline from one of the Company's terminals to a refinery in the Guanabara Bay ruptured, causing a release of crude oil into the bay. The Company has spent approximately US\$ 53 for cleaning up the oil in the Guanabara Bay, inclusive of a US\$ 18 fine imposed under Brazilian law and US\$ 8 the Company contributed to a fund created by the Federal Government to protect the Guanabara Bay. On January 19, 2001, pursuant to a new and untested Brazilian law, the Rio de Janeiro State Prosecutor filed a criminal lawsuit against the Company. This lawsuit could result in the imposition of additional fines against the Company and/or a judicial order requesting the Company to perform services to improve the environment. The Company is currently contesting the legal basis for the criminal lawsuit. Additionally, the Federal Prosecutor has filed criminal lawsuits against the former president of the Company and 9 other employees. The Company is also subject to several other investigations and potential civil and criminal lawsuits as a result of this spill. The Company cannot predict if the outcome of these proceedings will have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

In addition, as a result of the spill, on January 27, 2000, the National Council for the Environment enacted a resolution that obligated the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA), state environmental agencies and 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 oil and oil products in Brazil within 240 days from the enactment of the resolution. This resolution also mandated that the Company perform, within a six-month period, an independent environmental audit of all of our industrial installations located in the State of Rio de Janeiro. Finally, the resolution required all companies with activities related to the production of 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, the Company filed with the National Council for the Environment a plan and schedule for the implementation of independent environmental audits in all of the Company's plants located in Brazil. According to this plan and schedule, the Company expects to complete these audits by the end of 2003.



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On July 16, 2000, an oil spill occurred at the Presidente Getúlio Vargas refinery releasing crude oil in the surrounding area. A portion of the oil leaked into the Barigui River and the Iguaçú River. PETROBRAS spent approximately US\$ 38, including US\$ 20 in fines imposed by the State of Paraná and IBAMA to clean the rivers affected by the spill. The Federal and State of Paraná Prosecutors have filed a civil lawsuit against the Company seeking US\$ 1,176 in damages. The Company has filed its response to this action. Additionally, there are two other actions pending, one by the Instituto Ambiental do Paraná (Paraná Environmental Institute) and by another civil association called AMAR that have already been contested by the Company. The Company cannot predict whether these proceedings will have a material adverse effect on the financial condition, results of operations or cash flow of the Company.

On November 4, 2000, the Cypriot flag vessel Vergina II chartered by PETROBRAS collided with the south pier at the Company's Almirante Barroso terminal in São Sebastião and spilled oil in the São Sebastião canal. As a result of the wind and river currents, the spill affected certain beaches in São Sebastião and Ilhabela. PETROBRAS immediately notified the relevant authorities and initiated the clean up of the spill, which was concluded on November 8, 2000. As a result of the accident, the Company was fined approximately US\$ 30 by various local environmental agencies. The Company is 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, the Company's Araucária-Paranaguá pipeline ruptured as a result of an unusual movement of the soil and spilled fuel oil into the Sagrado, Meio, Neves and Nhundiaquara Rivers located in the state of Paraná. The Company finalized the cleaning of the river surface on February 20, 2001, recovering a significant quantity of fuel oil. As a result of the accident, the Company was fined approximately US\$ 80 by the Instituto Ambiental do Paraná (Paraná Environmental Institute), which the Company is contesting through administrative proceedings.

On March 15, 2001, a spill resulting from the accident involving the P-36 platform occurred, causing a release of diesel fuel and crude oil. The Company was fined by the Brazilian Environmental Institute (IBAMA) US\$ 3 in April 2001 for the spill and improper use of chemicals to disperse the oil. The Company is currently contesting these fines.

On October 18, 2001, as a result of a collision between the vessel Norma, owned by TRANSPETRO, and a rock, naphtha leaked into the sea at the exit from the port of Paranaguá. The accident, attributed to incorrect positioning of the signaling buoys at the site, did not cause any significant damage to the environment.

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The Company believes that future payments related to environmental clean up activities resulting from these incidents, if any, will not be material. These incidents, however, reinforced the need to implement the Company's Environmental Management and Operational Safety Excellence Program, whereby the Company has committed to spend approximately US\$ 916 through 2003 to upgrade its pipelines and other equipment, implement new technologies and improve the Company's emergency response readiness. As of December 31, 2002 the Company had spent approximately US\$ 677 under this program. PEGASO is planned to continue until the end of 2003, and has already absorbed funds of U.S.\$ 1,614 from 2000 to 2002.

**19 Derivative Instruments, Hedging and Risk Management Activities**

The Company is exposed to a number of market risks arising from the normal course of business. Such market risks principally involve the possibility that changes in interest rates, currency exchange rates or commodity prices will adversely affect the value of the Company's financial assets and liabilities or future cash flows and earnings. The Company maintains an overall risk management policy that is evolving under the direction of the Company's executive officers.

The Company may use derivative and non-derivative instruments to implement its overall risk management strategy. However, by using derivative instruments, the Company exposes itself to credit and market risk. Credit risk is the risk that a counterparty will fail to perform under the terms of the derivative contract. Market risk is the risk that a change in interest rates, currency exchange rates, or commodity prices will have an adverse effect on the value of a financial instrument. The Company addresses credit risk by restricting the counterparties to such derivative financial instruments to major financial institutions. Market risk is managed by the Company's executive officers. The Company does not hold or issue financial instruments for trading purposes.

**(a) Foreign Currency Risk Management**

The Company's foreign currency risk management strategy may use derivative instruments to protect against foreign exchange rate volatility, which may impair the value of certain of the Company's assets. The Company currently uses zero cost foreign exchange collars to implement this strategy.

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During 2000 the Company entered into three zero cost foreign exchange collars to reduce its exposure to variations between the U.S. Dollar and the Japanese Yen, and between the U.S. Dollar and EURO relative to long-term debt denominated in foreign currencies with a notional amount of approximately US\$ 470. The Company treats these instruments as non-hedge derivative instruments. These collars establish a ceiling and a floor for the associated exchange rates. If the exchange rate falls below the defined floor, the counterparty will pay to the Company the difference between the actual rate and the floor rate on the notional amount. Conversely, if the exchange rate increases above the defined ceiling, the Company will pay to the counterparty the difference between the actual rate and the ceiling rate on the notional amount. The contracts expire upon the maturity date of each note.

As of December 31, 2002 and 2001 the Company had a balance obligation of US\$ 80 and US\$ 119 respectively, and realized a gain of US\$ 39 in 2002 and a loss of US\$ 77 in 2001 associated with its zero cost foreign exchange collar contracts .

**(b) Commodity Price Risk Management**

The Company is exposed to commodity price risks through the fluctuation of oil and oil product prices. The Company's commodity risk management activities primarily consist of futures contracts traded on stock exchanges and options and swaps entered into with major financial institutions. The futures contracts hedge anticipated crude oil purchases and sales, generally forecasted to occur within a 30 to 360 day period, to reduce the Company's exposure to volatile commodity prices.

The Company's exposure on these contracts is limited to the differential on the volumes hedged between the contract value and the market value. Gains and losses on hedge transactions are recognized concurrently with gains and losses resulting from the underlying hedged transaction. For the years ending December 31, 2002, 2001 and 2000 the Company carried out hedging activities on 42.01%, 21.20% and 13.85 %, respectively, of its total traded volume, and recognized losses of US\$ 4, US\$ 6 and US\$ 12 respectively.

Additionally, in January 2001, the Company sold a series of put options to two counterparties to ensure a minimum price of US\$ 14.00 per barrel for 52 million barrels produced from its Barracuda and Caratinga oil and gas fields located in the Campos Basin for the period January 1, 2004 to December 31, 2007. The puts were subsequently sold to the special purpose company associated with the project. The puts were written to ensure that the financial institutions participating in the financing of the development of the fields receive the price required to generate the minimum required return on investment. The Company treats the puts as non-hedge derivative instruments. During 2002 and 2001, the Company realized a net gain of US\$ 8 and US\$ 5, respectively.

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**(c) Interest Rate Risk Management**

The Company's interest rate risk is a function of the Company's long-term debt and, to a lesser extent, short-term debt. The Company's foreign currency floating rate debt is principally subject to fluctuations in LIBOR and the Company's floating rate debt denominated in Reals is principally subject to fluctuations in the Brazilian long-term interest rate (TJLP), as fixed by the Brazilian Central Bank. The Company currently does not utilize derivative financial instruments to manage its exposure to fluctuations in interest rates.

**20 Financial Instruments**

In the normal course of its business, the Company uses various types of financial instruments. These instruments include recorded assets and liabilities, and also items such as derivatives, which principally involve off-balance sheet risk.

**(a) Concentrations of Credit Risk**

Substantial portions of the Company's assets including financial instruments are located in Brazil and substantially all of the Company's revenues and net income are generated in Brazil. The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of its cash equivalents, government securities, the Petroleum and Alcohol Account, trade receivables and future contracts.

The Company takes several measures to reduce its credit risk to acceptable levels. All cash equivalents in Brazil are maintained with federal banks in accordance with federal law. Time deposits in U.S. dollars are placed with creditworthy institutions in the United States. Additionally, all of the Company's available for sale securities and derivative contracts are either exchange traded or maintained with creditworthy financial institutions.

The Company monitors its credit risk associated with trade receivables by routinely assessing the creditworthiness of its customers. At December 31, 2002 and December 31, 2001, the Company's trade receivables were primarily maintained with large distributors.

As described in Note 10, the National Treasury Notes, NTN-H may be used in the settlement of the Petroleum and Alcohol Account.

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**(b) Fair Value**

Fair values are derived either from quoted market prices where available, or, in their absence, the present value of expected cash flows. The fair values reflect the cash that would have been received or paid if the instruments were settled at year end.

Fair values of cash and cash equivalents, trade receivables, the Petroleum and Alcohol Account short-term debt and trade payables approximate their carrying values. The fair value for the Company's available for sale government securities equals their carrying value as disclosed in Note 5(a).

The Company's debt included US\$ 7,346 and US\$ 5,416 at December 31, 2002 and December 31, 2001 that had estimated fair values of US\$ 6,791 and US\$ 5,218, respectively.

The call and put portion of the Company's zero cost foreign exchange collars at December 31, 2002 do not have nominal values and have a fair value of US\$ 8 and US\$ 88, respectively (US\$ 4 and US\$ 123 at December 31, 2001).

**21 Segment Information**

The following segment information has been prepared in accordance with SFAS 131 - Disclosure about Segments of an Enterprise and Related information ( SFAS 131 ). The Company operates under the following segments, which are described as follows:

Exploration and Production - This segment includes the Company's exploration, development and production activities in Brazil, as well as sales of crude oil and natural gas in the domestic and foreign markets.

Supply - This segment includes the Company's refining, logistic, transportation and commercialization activities for oil, oil products and fuel alcohol. Additionally, this segment includes petrochemical and fertilizers division, which includes investments in domestic petrochemical companies and the Company's two domestic fertilizer plants.

Distribution - This segment represents the oil product and fuel alcohol distribution activities conducted by the Company's majority owned subsidiary, Petrobras Distribuidora S.A. - BR in Brazil.

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Gas and Energy - This segment currently encompasses the commercialization and transportation of natural gas produced in or imported into Brazil. Additionally, this segment includes the Company's domestic electric energy commercialization activities as well as investments in domestic natural gas transportation companies, state owned natural gas distributors, thermal electric companies and fiber optic companies.

International - This segment represents the Company's international activities conducted in 13 countries, which include Exploration and Production, Supply, Distribution and Gas and Energy.

The items that cannot be attributed to the other areas are allocated to the group of corporate entities, especially those linked with corporate financial management, overhead related with central administration and other expenses, including actuarial expenses related with the pension and health-care plans.

The accounting information by business area was prepared based on the assumption of controllability, for the purpose of attribution to the business areas only items over which these areas have effective control.

The main criteria used to record the results and assets by business segments are summarized as follows:

Net operating revenue: these were considered to be the revenues from sales to third parties, plus revenues between the business segments, based on the internal transfer prices established by the areas;

The operating income includes net operating revenue, the costs of products and services sold, calculated per business segment, based on the internal transfer price and the other operating costs of each segment, as well as operating expenses, based on the expenses actually incurred in each segment;

Assets: covers the assets referring to each segment.

Revenue and net income information for the Gas and Energy segment were combined with the revenue and net income information of the Exploration and Production segments prior to January 1, 2001 because the changes in the Company's systems required to accommodate the Company's new segment reporting did not permit the practicable separation of revenue and cost information for these segments in those prior periods. The Company does not believe this classification of the Gas and Energy revenue and net income information materially changes the overall segment presentation.

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In periods prior to January 1, 2002, revenue and net income from the gas and energy activities of the international segment were added to revenue and net income from the exploration and production activities of the international segment, as our management did not separate our gas and energy operations abroad. In addition, the changes in our accounting systems adopted in connection with our new business segment reporting does not permit the practicable separation of revenue and cost information for those prior periods. We do not believe this classification of the gas and energy revenue and net income information materially changes the overall segment presentation.

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Year ended December 31, 2002

	Exploration and production	Supply	Gas and energy	International (see separate disclosure)	Distribution	Corporate	Eliminations	Total
<b>Current assets</b>	1,181	4,323	819	736	973	3,124	(959)	10,197
Cash and cash equivalents	1	509	16	211	59	2,505		3,301
Other current assets	1,180	3,814	803	525	914	619	(959)	6,896
<b>Investments in non-consolidated companies and other investments</b>	7	168	70	11	16	62		334
<b>Property, plant and equipment, net</b>	11,611	3,186	1,881	1,024	296	226		18,224
<b>Non current assets</b>	385	211	556	1,092	141	1,932	(1,054)	3,263
Petroleum and Alcohol Account						182		182
Government securities		2				206		208
Other assets	385	209	556	1,092	141	1,544	(1,054)	2,873
<b>Total assets</b>	13,184	7,888	3,326	2,863	1,426	5,344	(2,013)	32,018

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Year ended December 31, 2001

	Exploration and production	Supply	Gas and energy	International (see separate disclosure)	Distribution	Corporate	Eliminations	Total
<b>Current assets</b>	1,529	4,125	604	566	1,002	7,425	(925)	14,326
Cash and cash equivalents		553	60	145	30	6,572		7,360
Other current assets	1,529	3,572	544	421	972	853	(925)	6,966
<b>Investments in non-consolidated companies and other investments</b>	5	281	52	36	22	103		499
<b>Property, plant and equipment, net</b>	12,133	4,026	1,373	1,080	309	258		19,179
<b>Non current assets</b>	325	250	637	33	192	2,099	(676)	2,860
Petroleum and Alcohol Account						81		81
Government securities		3				209		212
Other assets	325	247	637	33	192	1,809	(676)	2,567
<b>Total assets</b>	13,992	8,682	2,666	1,715	1,525	9,885	(1,601)	36,864

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Year ended December 31, 2002							
International							
	Exploration and production	Supply	Gas and energy	Distribution	Corporate	Eliminations	Total
Current assets	374	215	37	109	201	(200)	736
Cash and cash equivalents	90	16		35	70		211
Other current assets	284	199	37	74	131	(200)	525
Investments in non-consolidated companies and other investments	9			2			11
Property, plant and equipment, net	835	126	11	49	3		1,024
Non current assets	420	8	(9)		1,275	(602)	1,092
Petroleum and Alcohol Account							
Government securities							
Other assets	420	8	(9)		1,275	(602)	1,092
Total assets	1,638	349	39	160	1,479	(802)	2,863

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Year ended December 31, 2001

	International						
	Exploration and production	Supply	Gas and energy	Distribution	Corporate	Eliminations	Total
Current assets	215	170	6	124	84	(33)	566
Cash and cash equivalents	72	30		11	32		145
Other current assets	143	140	6	113	52	(33)	421
Investments in non-consolidated companies and other investments	5	25	3	3			36
Property, plant and equipment, net	766	217	3	93	1		1,080
Non current assets	11	11	1	8	2		33
Petroleum and Alcohol Account							
Government securities							
Other assets	11	11	1	8	2		33
Total assets	997	423	13	228	87	(33)	1,715

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Year ended December 31, 2002								
	Exploration and production	Supply	Gas and energy	International (see separate disclosure)	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	2,346	12,073	747	986	6,460			22,612
Intersegment net operating revenues	10,700	5,269	170	99	102		(16,340)	
Net operating revenues	13,046	17,342	917	1,085	6,562		(16,340)	22,612
Cost of sales	(4,829)	(15,242)	(594)	(812)	(5,861)		15,832	(11,506)
Depreciation, depletion and amortization	(1,378)	(358)	(45)	(106)	(24)	(19)		(1,930)
Exploration, including exploratory dry holes and impairment	(449)			(61)				(510)
Selling, general and administrative Expenses	(177)	(584)	(54)	(90)	(442)	(394)		(1,741)
Research and development expenses	(74)	(37)	(5)			(31)		(147)
Costs and expenses	(6,907)	(16,221)	(698)	(1,069)	(6,327)	(444)	15,832	(15,834)
Results of non-consolidated companies		11	(94)	(95)				(178)
Financial income (expenses), net	(943)	(13)	(18)	31	5	(762)		(1,700)
Employee benefit expense		(2)			(14)	(435)		(451)
Other expenses, net	(160)	(13)	(504)	2	(46)	(516)	20	(1,217)
Income before income taxes and minority interest	5,036	1,104	(397)	(46)	180	(2,157)	(488)	3,232
Income tax benefits (expense)	(1,623)	(386)	(104)	(64)	(58)	914	168	(1,153)
Minority interest		(7)	311	(4)	(31)	(37)		232
Net income (loss)	3,413	711	(190)	(114)	91	(1,280)	(320)	2,311

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Year ended December 31, 2001

	Exploration and production	Supply	Gas and energy	International (see separate disclosure)	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	308	15,969	659	777	6,836			24,549
Intersegment net operating revenues	9,796	5,757	177	71	100		(15,901)	
Net operating revenues	10,104	21,726	836	848	6,936		(15,901)	24,549
Cost of sales	(3,766)	(17,279)	(600)	(541)	(6,310)		15,689	(12,807)
Depreciation, depletion and amortization	(1,228)	(301)	(62)	(101)	(28)	(9)		(1,729)
Exploration, including exploratory dry holes and impairment	(463)			(86)				(549)
Selling, general and administrative expenses	(128)	(745)	(46)	(57)	(414)	(361)		(1,751)
Research and development expenses	(63)	(40)	(3)			(26)		(132)
Costs and expenses	(5,648)	(18,365)	(711)	(785)	(6,752)	(396)	15,689	(16,968)
Results of non-consolidated companies		28	8	(44)				(8)
Financial income (expenses), net	(372)	(112)	(242)	12	(1)	364	3	(348)
Employee benefit expense						(594)		(594)
Other expenses, net	(458)	319	(29)	88	24	(1,783)		(1,839)
Income before income taxes and minority interest	3,626	3,596	(138)	119	207	(2,409)	(209)	4,792
Income tax benefits (expense)	(1,187)	(1,058)	(38)	(91)	(101)	1,001	85	(1,389)
Minority interest			122	(4)	(28)	(2)		88
Net income (loss)	2,439	2,538	(54)	24	78	(1,410)	(124)	3,491



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International							
Exploration	and production	Supply	Gas and energy	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	96	473	36	377	4		986
Intersegment net operating revenues	188	445	—	—	—	(534)	99
Net operating revenues	284	918	36	377	4	(534)	1,085
Cost of sales	(75)	(848)	(30)	(391)	(2)	534	(812)
Depreciation, depletion and amortization	(87)	(13)	—	(5)	(1)	—	(106)
Exploration, including exploratory dry holes	(61)	—	—	—	—	—	(61)
Selling, general and administrative expenses	(29)	(9)	—	(19)	(33)	—	(90)
Research and development expenses	—	—	—	—	—	—	—
Costs and expenses	(252)	(870)	(30)	(415)	(36)	534	(1,069)
Results of non-consolidated companies	—	—	—	—	(95)	—	(95)
Financial income (expenses), net	6	(7)	(6)	—	38	—	31
Employee benefit expense	—	—	—	—	—	—	—
Other expenses, net	8	(5)	—	(3)	2	—	2
Income before income taxes and minority interest	46	36	—	(41)	(87)	—	(46)
Income tax benefits (expense)	(50)	—	—	—	(14)	—	(64)
Minority interest	(1)	(4)	—	—	1	—	(4)
Net income (loss)	(5)	32	—	(41)	(100)	—	(114)

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Year ended December 31, 2001							
International							
	Exploration and production	Supply	Gas and energy	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	217	469		90	1		777
Intersegment net operating revenues	178	160	-			(267)	71
Net operating revenues	395	629		90	1	(267)	848
Cost of sales	(129)	(597)		(76)	(1)	262	(541)
Depreciation, depletion and amortization	(94)	(6)		(1)			(101)
Exploration, including exploratory dry holes	(86)						(86)
Selling, general and administrative expenses	(36)	(9)		(7)	(5)		(57)
Research and development expenses							
Costs and expenses	(345)	(612)	-	(84)	(6)	262	(785)
Results of non-consolidated companies					(44)		(44)
Financial income (expenses), net	13	(1)					12
Employee benefit expense							
Other expenses, net	100	(1)	-	(1)	(10)		88
Income before income taxes and minority interest	163	15		5	(59)	(5)	119
Income tax benefits (expense)	(58)	(8)		(29)	4		(91)
Minority interest		(4)					(4)
Net income (loss)	105	3	-	(24)	(55)	(5)	24



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Year ended December 31, 2000								
	Exploration and production	Supply	Gas and energy	International (see separate disclosure)	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	891	18,620		794	6,650			26,955
Intersegment net operating revenues	11,248	5,605			98		(16,951)	
Net operating revenues	12,139	24,225		794	6,748		(16,951)	26,955
Cost of sales	(4,100)	(19,709)		(414)	(6,042)		16,816	(13,449)
Depreciation, depletion and amortization	(1,256)	(519)		(141)	(31)	(75)		(2,022)
Exploration, including exploratory dry holes and impairment	(412)			(65)				(477)
Selling, general and administrative expenses	(52)	(579)		(51)	(381)	(387)		(1,450)
Research and development expenses	(58)	(49)		(1)		(44)		(152)
Costs and expenses	(5,878)	(20,856)		(672)	(6,454)	(506)	16,816	(17,550)
Results of non-consolidated companies		19			7			26
Financial income (expenses), net	(302)	(310)		(4)	5	259	(19)	(371)
Employee benefit expense						(370)		(370)
Other expenses, net	(73)	(270)		(1)	(56)	(487)		(887)
Income before income taxes and minority interest	5,886	2,808		117	250	(1,104)	(154)	7,803
Income tax benefits (expense)	(1,958)	(971)		(21)	(70)	479	18	(2,523)
Minority interest		106		(3)	(41)			62
Net income (loss)	3,928	1,943		93	139	(625)	(136)	5,342

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Year ended December 31, 2000							
International							
	Exploration and production	Supply	Gas and energy	Distribution	Corporate	Eliminations	Total
Net operating revenues to third parties	221	564			9		794
Intersegment net operating revenues	230					(230)	
Net operating revenues	451	564			9	(230)	794
Cost of sales	(105)	(532)			(7)	230	(414)
Depreciation, depletion and amortization	(137)	(4)					(141)
Exploration, including exploratory dry holes	(65)						(65)
Selling, general and administrative expenses	(48)	(3)					(51)
Research and development expenses	(1)						(1)
Costs and expenses	(356)	(539)			(7)	230	(672)
Results of non-consolidated companies							
Financial income (expenses), net	(2)	(2)					(4)
Employee benefit expense							
Other expenses, net	2	(1)			(2)		(1)
Income before income taxes and minority interest	95	22					117
Income tax benefits (expense)	(21)						(21)
Minority interest		(3)					(3)
Net income (loss)	74	19					93

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Capital expenditures were as follows:

	Years ended December 31		
	Capital expenditures		
	2002	2001	2000
Exploration and production	3,156	2,866	2,581
Supply	945	642	569
Gas and energy	268	192	50
International			
Exploration and production	224	318	236
Supply	8	3	9
Gas and energy	4	3	
Distribution	2	2	
Corporate	3		
Distribution	139	86	68
Corporate	162	142	70
	<u>4,911</u>	<u>4,254</u>	<u>3,583</u>

The Company's gross sales, classified by geographic destination, are as follows:

	Years ended December 31		
	2002	2001	2000
Brazil	27,410	30,122	30,630
International	5,577	4,023	4,866
	<u>32,987</u>	<u>34,145</u>	<u>35,496</u>

The total amounts sold of products and services to the two principal customers in 2002, 2001 and 2000 were US\$ 2,693, US\$ 2,907, US\$ 3,045 and US\$ 2,549, US\$ 2,871, US\$ 2,815, respectively.

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**22 Related Party Transactions**

The Company is controlled by the Federal Government and has numerous transactions with other state-owned companies in the ordinary course of business.

Transactions with major related parties resulted in the following balances:

	As of December 31			
	2002		2001	
	Assets	Liabilities	Assets	Liabilities
PETROS (Pension fund)	176	21	665	27
Banco do Brasil S.A.	1,859	141	5,378	25
BNDES (Note 11(b))		599		943
Federal Government	79		114	
ANP			6	
Restricted deposits for legal proceedings	290		335	
Government securities (Note 5)	28		39	
Petroleum and Alcohol Account - Receivable from Federal Government (Note 10)	182		81	
Others	721	26	663	26
	<u>3,335</u>	<u>787</u>	<u>7,281</u>	<u>1,021</u>
Current	<u>2,380</u>	<u>62</u>	<u>5,700</u>	<u>163</u>
Long-term	<u>955</u>	<u>725</u>	<u>1,581</u>	<u>858</u>

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These balances are included in the following balance sheet classifications:

	As of December 31			
	2002		2001	
	Assets	Liabilities	Assets	Liabilities
<b>Assets</b>				
<b>Current</b>				
Cash and cash equivalents	1,859		5,378	
Accounts receivable	329		100	
Other current assets	192		222	
<b>Other</b>				
Government securities -	28		39	
Petroleum and Alcohol Account - receivable from Federal Government	182		81	
Restricted deposits for legal proceedings	290		335	
Pension Fund	176		665	
Other assets	279		461	
<b>Liabilities</b>				
<b>Current</b>				
Current portion of long-term debt		45		85
Current liabilities		17		58
Short-term debt				20
<b>Long-term</b>				
Long-term debt		546		848
Other liabilities		179		10
	<u>3,335</u>	<u>787</u>	<u>7,281</u>	<u>1,021</u>

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The principal amounts of business and financial operations carried out with related parties are as follows:

	Years ended December 31					
	2002		2001		2000	
	Income	Expense	Income	Expense	Income	Expense
Sales of products and services						
BRASKEM S.A.	631		929		1,200	
Centrais Elet. do Norte do Brasil S.A. Eletronorte	159		120		152	
COPEL S.A.	265		433		988	
Manaus Energia S.A.	272		214		127	
Petroquímica União S.A.	350		428		571	
Others	638	(308)	834		603	
Financial income						
Petroleum and Alcohol Account - Receivable from Federal Government (Note 10)	2		16		35	
Government securities (Note 5)	84		243		292	
Others	760		863		609	
Financial expenses		(234)		(118)		(151)
Other expenses, net		(29)		(405)		(106)
	<u>3,161</u>	<u>(571)</u>	<u>4,080</u>	<u>(523)</u>	<u>4,577</u>	<u>(257)</u>

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**PETRÓLEO BRASILEIRO S.A. -  
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**Supplementary Information on Oil and Gas  
Exploration and Production Activities (Unaudited)  
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In accordance with SFAS 69 - Disclosures About Oil and Gas Producing Activities ( SFAS 69 ), this section provides supplemental information on oil and gas exploration and producing activities of the Company. The information included in items (i) through (iii) provides historical cost information pertaining to costs incurred in exploration, property acquisitions and development, capitalized costs and results of operations. The information included in items (iv) and (v) present information on PETROBRAS' estimated net proved reserve quantities, standardized measure of estimated discounted future net cash flows related to proved reserves, and changes in estimated discounted future net cash flows.

Beginning in 1995, the Federal Government of Brazil undertook a comprehensive reform of the country's oil and gas regulatory system. On November 9, 1995, the Brazilian Constitution was amended to authorize the Federal 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 PETROBRAS' effective monopoly. The amendment was implemented by the Petroleum Law, which liberated the fuel market in Brazil beginning January 1, 2002.

The Petroleum Law established a new regulatory framework ending PETROBRAS' exclusive agency and enabling competition in all aspects of the oil and gas industry in Brazil. As provided in the Petroleum Law, PETROBRAS was granted the exclusive right for a period of 27 years to exploit the petroleum reserves in all fields where the Company had previously commenced production. However, the Petroleum Law established a procedural framework for PETROBRAS to claim exclusive exploratory (and, in case of success, development) rights for a period of up to three years with respect to areas where the Company could demonstrate that it had established prospects. To perfect its claim to explore and develop these areas, the Company had to demonstrate that it had the requisite financial capacity to carry out these activities, alone or through financing or partnering arrangements.

During 2001, PETROBRAS returned to the ANP the rights over 59 concessions previously granted to the Company on August 6, 1998. On August 6, 1998, PETROBRAS and ANP signed concession contracts relating to 397 areas, consisting of 231 production areas, 115 exploration areas and 51 development areas. In May 1998, PETROBRAS relinquished 26 exploratory areas out of the 115 initially granted by ANP and obtained an extension of its exclusive exploration period from three to five years with respect to 34 exploration areas and from three to six years with respect to two exploration areas.

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Exploration and Production Activities (Unaudited)  
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The International geographic area represents BRASPETRO's activities in Angola, Argentina, Bolivia, Colombia, Nigeria, the United Kingdom and the United States of America. The Company has no non-consolidated companies involved in exploration and production activities.

**(i) Capitalized costs relating to oil and gas producing activities**

The following table summarizes capitalized costs for oil and gas exploration and production activities with the related accumulated depreciation, depletion and amortization, and abandonment allowances:

	<b>As of December 31, 2002</b>		
	<b>Brazil</b>	<b>International</b>	<b>Worldwide</b>
Unproved oil and gas properties	243	337	580
Proved oil and gas properties	10,344	1,192	11,536
Support equipment	8,062	15	8,077
	<u>18,649</u>	<u>1,544</u>	<u>20,193</u>
Gross capitalized costs	18,649	1,544	20,193
Depreciation and depletion	(10,514)	(709)	(11,223)
	<u>8,135</u>	<u>835</u>	<u>8,970</u>
Construction and installations in progress	3,476		3,476
	<u>11,611</u>	<u>835</u>	<u>12,446</u>
Net capitalized costs	<u>11,611</u>	<u>835</u>	<u>12,446</u>



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	As of December 31, 2001		
	Brazil	International	Worldwide
Unproved oil and gas properties	165	340	505
Proved oil and gas properties	12,976	1,083	14,059
Support equipment	9,686	14	9,700
	<u>22,827</u>	<u>1,437</u>	<u>24,264</u>
Gross capitalized costs	22,827	1,437	24,264
Depreciation and depletion	(13,425)	(671)	(14,096)
	<u>9,402</u>	<u>766</u>	<u>10,168</u>
Construction and installations in progress	2,731	766	2,731
	<u>12,133</u>	<u>766</u>	<u>12,899</u>
Net capitalized costs	12,133	766	12,899

**(ii) Costs incurred in oil and gas property acquisition, exploration and development activities**

Costs incurred are summarized below and include both amounts expensed and capitalized:

	Year ended December 31, 2002		
	Brazil	International	Worldwide
Property acquisitions			
Proved		15	15
Unproved	12	4	16
Exploration costs	725	104	829
Development costs	2,691	82	2,773
	<u>3,428</u>	<u>205</u>	<u>3,633</u>

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	Year ended December 31, 2001		
	Brazil	International	Worldwide
Property acquisitions			
Proved			
Unproved	62	121	183
Exploration costs	528	110	638
Development costs	2,411	119	2,530
	<u>3,001</u>	<u>350</u>	<u>3,351</u>

	Year ended December 31, 2000		
	Brazil	International	Worldwide
Property acquisitions			
Proved		4	4
Unproved	92	16	108
Exploration costs	540	112	652
Development costs	2,445	125	2,570
	<u>3,077</u>	<u>257</u>	<u>3,334</u>

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Exploration and Production Activities (Unaudited)  
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**(iii) Results of operations for oil and gas producing activities**

The Company's results of operations from oil and gas producing activities for the years ending December 31, 2002, 2001 and 2000 are shown in the following table. The Company transfers substantially all of its Brazilian crude oil and gas production to supply segment in Brazil. In 2000, the Company began exporting a small portion of its Brazilian oil production and selling it at spot prices determined at the shipment's destination point. Because the Brazilian spot market for oil and gas products has not yet been developed, the Company estimates the price of Brazilian crude oil based upon a netback pricing methodology based upon year end prices for Brent crude oil, giving effect to product quality and transportation considerations within Brazil including tariffs, refining allocation and availability considerations, and internal demand. The prices calculated by the Company's model may not be indicative of the price the Company would have realized had this production been sold in an unregulated spot market. Additionally, the prices calculated by the Company's model may not be indicative of the future prices to be realized by the Company after January 1, 2002, when full price deregulation began. Gas prices used are contracted prices to third parties.

Production costs are lifting costs incurred to operate and maintain productive wells and related equipment and facilities, including such costs as operating labor, materials, supplies, fuel consumed in operations and the costs of operating natural liquid gas plants. Production costs also include administrative expenses and depreciation and amortization of equipment associated with production activities.

Exploration expenses include the costs of geological and geophysical activities and non-productive exploratory wells. Depreciation and amortization expenses relate to assets employed in exploration and development activities. In accordance with SFAS 69, income taxes are based on statutory tax rates, reflecting allowable deductions. Interest income and expense are excluded from the results reported in this table.

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	Year ended December 31, 2002		
	Brazil	International	Worldwide
Revenues:			
Sales to third parties	2,346	96	2,442
Intersegment	10,700	188	10,888
	<u>13,046</u>	<u>284</u>	<u>13,330</u>
Production costs	(4,829)	(75)	(4,904)
Exploration expenses	(392)	(43)	(435)
Depreciation, depletion, amortization	(1,378)	(87)	(1,465)
Impairment of oil and gas properties	(57)	(18)	(75)
	<u>6,390</u>	<u>61</u>	<u>6,451</u>
Income tax expense	(2,173)	(58)	(2,231)
	<u>4,217</u>	<u>3</u>	<u>4,220</u>
Results of operations	<u>4,217</u>	<u>3</u>	<u>4,220</u>

	Year ended December 31, 2001		
	Brazil	International	Worldwide
Revenues:			
Sales to third parties	308	217	525
Intersegment	9,796	178	9,974
	<u>10,104</u>	<u>395</u>	<u>10,499</u>
Production costs	(3,766)	(112)	(3,878)
Exploration expenses	(334)	(70)	(404)
Depreciation, depletion, amortization	(1,228)	(94)	(1,322)
Impairment of oil and gas properties	(129)	(16)	(145)
	<u>4,647</u>	<u>103</u>	<u>4,750</u>
Income tax expense	(1,580)	(43)	(1,623)
	<u>3,067</u>	<u>60</u>	<u>3,127</u>
Results of operations	<u>3,067</u>	<u>60</u>	<u>3,127</u>

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	Year ended December 31, 2000		
	Brazil	International	Worldwide
Revenues:			
Sales to third parties	891	221	1,112
Intersegment	11,248	230	11,478
	12,139	451	12,590
Production costs	(4,100)	(89)	(4,189)
Exploration expenses	(397)	(43)	(440)
Depreciation, depletion, amortization	(1,256)	(137)	(1,393)
Impairment of oil and gas properties	(15)	(22)	(37)
Results before income taxes	6,371	160	6,531
Income tax benefit (expense)	(2,166)	(66)	(2,232)
Results of operations	4,205	94	4,299

**(iv) Reserve quantities information**

The Company's estimated net proved oil and gas reserves and changes thereto for the years 2002, 2001 and 2000 are shown in the following table. Proved reserves are estimated by the Company's reservoir engineers in accordance with the reserve definitions prescribed by the Securities and Exchange Commission.

Proved oil and gas reserves are the estimated quantities of crude oil, natural gas and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Proved reserves do not include additional quantities recoverable beyond the term of the concession or contract, or that may result from extensions of currently proved areas, or from application of secondary or tertiary recovery processes not yet tested and determined to be economic.

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Proved developed reserves are the quantities expected to be recovered from existing wells with existing equipment and operating methods. Proved undeveloped reserves are those volumes which are expected to be recovered as a result of future investments in drilling, re-equipping existing wells and installing facilities necessary to deliver the production from these reserves.

In some cases, substantial new investments in additional wells and related facilities will be required to recover these proved reserves. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of reserves are subject to change as additional information becomes available.

A summary of the annual changes in the proved reserves of crude oil and natural gas follows:

	Oil (millions of barrels)			Gas (billions of cubic feet)		
	Brazil	International	Worldwide	Brazil	International	Worldwide
<b>Worldwide Net Proved Developed and Undeveloped Reserves</b>						
Reserves at January 1, 2000	8,155.4	123.1	8,278.5	6,860.8	637.6	7,498.4
Revisions of previous estimates	610.3	7.8	618.1	(182.9)	1,574.2	1,391.3
Extensions, discoveries and improved recovery		14.3	14.3	2.4	0.3	2.7
Purchase of reserves in place		1.5	1.5			
Sales of reserves in place	(91.3)		(91.3)	(18.3)		(18.3)
Production for the year	(447.0)	(17.8)	(464.8)	(395.2)	(38.9)	(434.1)
Reserves at December 31, 2000	8,227.4	128.9	8,356.3	6,266.8	2,173.2	8,440.0
Revisions of previous estimates	(949.6)	(0.3)	(949.9)	401.1	13.0	414.1
Extensions, discoveries and improved recovery	877.6	2.2	879.8	835.3	65.5	900.8
Sales of reserves in place	(31.6)	(20.2)	(51.8)	(194.0)	(38.8)	(232.8)
Production for the year	(471.0)	(14.6)	(485.6)	(423.9)	(50.7)	(474.6)
Reserves at December 31, 2001	7,652.8	96.0	7,748.8	6,885.3	2,162.2	9,047.5

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	Oil (millions of barrels)			Gas (billions of cubic feet)		
	Brazil	International	Worldwide	Brazil	International	Worldwide
<b>Worldwide Net Proved Developed and Undeveloped Reserves</b>						
Reserves at December 1, 2001	7,652.8	96.0	7,748.8	6,885.3	2,162.2	9,047.5
Revisions of previous estimates	822	3.1	825.1	787	(49.8)	835.8
Extensions, discoveries and improved recovery	888.2	10.8	899.0	102.2	9.2	111.4
Purchase of reserves in place		23.6	23.6		71.5	71.5
Production for the year	(529.8)	(11.8)	(541.6)	(446.7)	(48.1)	(494.8)
Reserves at December 31, 2002	8,833.2	121.7	8,954.9	7,327.8	2,145.0	9,472.8
<b>Net proved Developed Reserves</b>						
At January 1, 2000	3,181.5	80.4	3,261.9	3,604.6	349.0	3,953.6
At December 31, 2000	3,780.8	80.1	3,860.9	3,614.3	1,368.4	4,982.7
At December 31, 2001	3,899.4	66.6	3,966.0	3,946.0	1,336.8	5,282.8
At December 31, 2002	3,912.9	94.7	4,007.6	3,892.5	2,043.9	5,936.4

**(v) Standardized measure of discounted future net cash flows relating to proved oil and gas quantities and changes therein**

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of SFAS 69. Estimated future cash inflows from production in Brazil are computed by applying year-end prices based upon the Company's internal pricing methodology for oil and gas to year-end quantities of estimated net proved reserves. Estimated future cash inflows from production related to the Company's International segment are computed by applying year-end prices for oil and gas to year-end quantities of estimated net proved reserves. Future price changes are limited to those provided by contractual arrangements in existence at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on year-end cost indices, assuming continuation of year-end economic conditions. Estimated

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future income taxes are calculated by applying appropriate year-end statutory tax rates. These rates reflect allowable deductions and are applied to estimated future pre-tax net cash flows, less the tax basis of related assets. Discounted future net cash flows are calculated using 10 percent midperiod discount factors. This discounting requires a year-by-year estimate of when the future expenditures will be incurred and when the reserves will be produced.

The information provided does not represent management's estimate of PETROBRAS' expected future cash flows or value of proved oil and gas reserves. Estimates of proved reserve quantities are imprecise and change over time as new information becomes available. Moreover, probable and possible reserves, which may become proved in the future, are excluded from the calculations. The arbitrary valuation prescribed under SFAS No. 69 requires assumptions as to the timing and amount of future development and production costs. The calculations are made as of December 31 each year and should not be relied upon as an indication of PETROBRAS' future cash flows or the value of its oil and gas reserves.

	<u>Brazil</u>	<u>International</u>	<u>Worldwide</u>
<b>At December 31, 2002</b>			
Future cash inflows	210,063	6,759	216,822
Future production costs	(84,191)	(1,625)	(85,816)
Future development costs	(13,798)	(358)	(14,156)
Future income tax expenses	(37,934)	(1,906)	(39,840)
	<u>74,140</u>	<u>2,870</u>	<u>77,010</u>
Undiscounted future net cash flows			
10 percent midyear annual discount for timing of estimated cash flows	(36,932)	(1,364)	(38,296)
	<u>37,208</u>	<u>1,506</u>	<u>38,714</u>
Standardized measure of discounted future net cash flows	<u>37,208</u>	<u>1,506</u>	<u>38,714</u>

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	<u>Brazil</u>	<u>International</u>	<u>Worldwide</u>
<b>At December 31, 2001</b>			
Future cash inflows	129,989	5,217	135,206
Future production costs	(56,087)	(1,356)	(57,443)
Future development costs	(9,650)	(277)	(9,927)
Future income tax expenses	(21,810)	(1,526)	(23,336)
	<u>42,442</u>	<u>2,058</u>	<u>44,500</u>
Undiscounted future net cash flows	42,442	2,058	44,500
10 percent midyear annual discount for timing of estimated cash flows	(21,531)	(1,023)	(22,554)
Standardized measure of discounted future net cash flows	<u>20,911</u>	<u>1,035</u>	<u>21,946</u>
<b>At December 31, 2000</b>			
Future cash inflows	182,737	6,241	188,978
Future production costs	(70,620)	(1,954)	(72,574)
Future development costs	(10,431)	(504)	(10,935)
Future income tax expenses	(33,394)	(1,312)	(34,706)
	<u>68,292</u>	<u>2,471</u>	<u>70,763</u>
Undiscounted future net cash flows	68,292	2,471	70,763
10 percent midyear annual discount for timing of estimated cash flows	(36,671)	(1,096)	(37,767)
Standardized measure of discounted future net cash flows	<u>31,621</u>	<u>1,375</u>	<u>32,996</u>

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The following are the principal sources of change in the standardized measure of discounted net cash flows:

	Brazil			International		
	2002	2001	2000	2002	2001	2000
Balance at January 1	20,911	31,621	35,641	1,035	1,375	911
Sales and transfers of oil and gas, net of production costs	(7,921)	(6,338)	(8,039)	(223)	(283)	(362)
Development costs incurred	2,691	2,411	2,445	82	119	125
Purchases of reserves				168		18
Sales of reserves		(550)	(336)		(163)	
Extensions, discoveries and improved recovery, less related costs	3,908	2,629	2	121	95	96
Revisions of previous quantity estimates	6,189	(3,944)	1,126	(45)	163	618
Net changes in prices and production costs	18,500	(15,446)	(5,393)	613	(507)	311
Changes in future development costs	(673)	(339)	(1,303)	13	(147)	(164)
Accretion of discount	3,149	5,670	5,406	(26)	(14)	114
Net change in income taxes	(9,546)	5,197	2,072	(232)	397	(292)
Balance at December 31	37,208	20,911	31,621	1,506	1,035	1,375

[Additional columns below]

[Continued from above table, first column(s) repeated]

	Worldwide		
	2002	2001	2000
Balance at January 1	21,946	32,996	36,552
Sales and transfers of oil and gas, net of production costs	(8,144)	(6,621)	(8,401)
Development costs incurred	2,773	2,530	2,570
Purchases of reserves	163		18
Sales of reserves		(713)	(336)
Extensions, discoveries and improved recovery, less related costs	4,029	2,724	98
Revisions of previous quantity estimates	6,144	(3,781)	1,744

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Net changes in prices and production costs	19,144	(15,953)	(5,082)
Changes in future development costs	(660)	(486)	(1,467)
Accretion of discount	3,123	5,656	5,520
Net change in income taxes	(9,804)	5,594	1,780
	<u>          </u>	<u>          </u>	<u>          </u>
Balance at December 31	38,714	21,946	32,996
	<u>          </u>	<u>          </u>	<u>          </u>

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