

BRAZILIAN PETROLEUM CORP

Form 20-F

June 30, 2005

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**UNITED STATES**  
**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, 2004

Commission File Number 1-15106

Commission File Number: 333-14168

**PETRÓLEO BRASILEIRO S.A. PETROBRAS**  
(Exact name of registrant as specified in its charter)

**Petrobras International Finance Company**  
(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)

**Cayman Island**  
(Jurisdiction of incorporation or organization)

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Avenida República do Chile, 65  
20035-900 Rio de Janeiro RJ  
Brazil

Anderson Square Building  
P.O. Box 714

George Town, Grand Cayman

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(Address of principal executive offices)

Cayman Islands  
(Address of principal executive offices)

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

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

**Title of each class:**

PIFCo U.S.\$500,000,000 9.125% Senior Notes due 2007  
PIFCo U.S.\$450,000,000 9.875% Senior Notes due 2008  
PIFCo U.S.\$400,000,000 9.00% Global Step-Up Notes due 2008  
PIFCo U.S.\$600,000,000 9.750% Senior Notes due 2011  
PIFCo U.S.\$750,000,000 9.125% Global Notes due 2013  
PIFCo U.S.\$750,000,000 8.375% Global Notes due 2018  
PIFCo U.S.\$600,000,000 7.75% Global Notes due 2014

**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, 2004, there were outstanding:

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634,168,418 PETROBRAS Common Shares, without par value

462,369,507 PETROBRAS Preferred Shares, without par value

50,000 PIFCo Common Shares

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:

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

international and Brazilian political, economic and social developments;

our ability to find, acquire or gain access to additional reserves and to successfully develop our current ones;

uncertainties inherent in making estimates of our reserves;

our ability to obtain financing;

competition;

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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;

military operations, terrorists acts, wars or embargoes;

the cost and availability of adequate insurance coverage; and

other factors discussed below under Risk Factors.

These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially from those expressed or forecast in any forward-looking statements as a result of a variety of factors, including those in 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.

Unless the context otherwise requires, the terms Petrobras, we, us, and our refer to *Petróleo Brasileiro S.A.-Petrobras* and its consolidated subsidiaries, including *Petrobras International Finance Company*. The term PIFCo refers to *Petrobras International Finance Company* and its subsidiaries.

## **CERTAIN TERMS AND CONVENTIONS**

A glossary of petroleum industry terms, a table of abbreviations and a conversion table are presented beginning on page 190.

## **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. 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.

## **Petrobras**

The audited consolidated financial statements of Petrobras and our consolidated subsidiaries as of December 31, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, 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 also publish financial statements in Brazil in Reais in accordance with the accounting principles required by Brazilian Corporation 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.

We are required by Brazilian Corporation Law to change auditors every five years and to select auditors through a bidding process. Since June 2003, Ernst & Young Auditores Independentes S/S has served as our independent auditors and audited our financial statements for each of the years ending December 31, 2004 and 2003. PricewaterhouseCoopers Auditores Independentes audited our financial statements for each of the years ending December 31, 2002, 2001 and 2000.

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Our functional currency is the Brazilian Real. 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 our 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. U.S. dollar amounts presented in this annual report have been translated from Reais at the period-end exchange rate for balance sheet items and 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 2005 at an estimated average exchange rate of R\$3.0147 to U.S.\$1.00, and future calculations involving an assumed price of crude oil have been

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calculated using a Brent crude oil price of U.S.\$23.00 per barrel for 2005 and thereafter, adjusted for our quality and locational differences, 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.

We signed a final agreement for the acquisition of Petrobras Energia Participaciones S.A., or PEPSA, and Petrolera Entre Lomas S.A., or PELSA, in October 2002 and the acquisition was approved by Argentine government agencies in May 2003. Our results of operations for 2002 do not include PEPSA and PELSA's results and our results of operations for 2003 only include PEPSA and PELSA's results from June through December of 2003. We acquired Liqueigás Distribuidora S.A. (formerly Sophia do Brasil S.A. and Agip do Brasil S.A.) in August 2004. Our results of operations for 2004 only include Liqueigás Distribuidora's results from August to December of 2004. See Note 20 to our audited consolidated financial statements for further information about these acquisitions.

We adopted FIN 46 in our financial statements for the year ended December 31, 2003. Our interest in certain project financings special purpose entities and thermoelectric plants were consolidated on a line-by-line basis in the income statement beginning as of January 1, 2004. Although there were effects in each line of the income statement, it did not have a significant impact on our net income.

## **PIFCo**

PIFCo's functional currency is the U.S. dollar. Substantially all of PIFCo's sales are made in U.S. dollars and all of its debt is denominated in U.S. dollars. Accordingly, PIFCo's audited consolidated financial statements as of December 31, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, and the accompanying notes contained in this annual report have been presented in U.S. dollars and prepared in accordance with U.S. GAAP and include PIFCo's wholly-owned subsidiaries: Petrobras Europe Limited, Petrobras Finance Limited, Bear Insurance Company Limited BEAR (which Brasoil, a Petrobras subsidiary, transferred to PIFCo in January 2003) and Petrobras Netherlands B.V. (which PIFCo transferred to Petrobras in January 2003). See Item 5. Operating and Financial Review and Prospects and Note 1 to the PIFCo audited consolidated financial statements.

## **PRESENTATION OF INFORMATION CONCERNING RESERVES**

The estimates of our proved reserves of crude oil and natural gas as of December 31, 2004, included in this annual report have been calculated according to the technical definitions required by the U.S. Securities and Exchange Commission, or the SEC. DeGolyer and MacNaughton provided estimates of most of our net domestic reserves as of December 31, 2004. All reserve estimates involve some degree of uncertainty. See Item 3. Key Information Risk Factors Risks Relating to Our Operations for a description of the risks relating to our reserves and our reserve estimates.

We also file oil and gas reserve estimates with governmental authorities in most of the countries in which we operate. On January 14, 2005, we filed reserve estimates for Brazil with the ANP, in accordance with Brazilian rules and regulations, totaling 11.1 billion barrels of crude oil and NGLs and 11,814 billion cubic feet of natural gas. The reserve estimates we filed with the ANP and those provided herein differ by more than five percent. This difference is due to (1) the ANP requirement that we estimate proved reserves through the technical abandonment of production wells, as opposed to limiting reserve estimates to the life of our concession contracts as required by Rule 4-10 of Regulation S-X and (2) different technical criteria for booking proved reserves, including the use of 3-D seismic data to establish proved reserves in Brazil. We also file reserve estimates from our international operations with various governmental agencies under the guidelines of the Society of Petroleum

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Engineers (SPE). The aggregate reserve estimates from our international operations, under SPE guidelines, amounted to 1.0 billion barrels of crude oil and NGLs and 5,188 billion cubic feet of natural gas, which differs by approximately 50 percent from reserve estimates provided herein because the SPE's different technical guidelines allow for (1) the booking of reserves in Bolivia beyond the life of certain gas sale contracts and (2) the booking of reserves in Nigeria based on 3-D seismic data and certain oil recovery techniques, such as fluid injection, without the performance of pilot project tests.

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**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

*Petrobras*

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, 2004 have been derived from our audited consolidated financial statements, which were audited by Ernst & Young Auditores Independentes S/S for each of the years ending December 31, 2004 and 2003 and by PricewaterhouseCoopers Auditores Independentes for each of the years ending December 31, 2002, 2001 and 2000. The information below should be read in conjunction with, and is qualified in its entirety by reference to, our audited consolidated financial statements and the accompanying notes and Item 5. Operating and Financial Review and Prospects.

**Table of Contents****BALANCE SHEET DATA**

	As of December 31,				
	2004	2003	2002	2001	2000
	(in millions of U.S. dollars)				
<b>Assets</b>					
Current assets:					
Cash and cash equivalents	\$ 6,856	\$ 8,344	\$ 3,301	\$ 7,360	\$ 5,826
Accounts receivable, net	4,285	2,905	2,267	2,759	2,211
Inventories	4,904	2,947	2,540	2,399	3,087
Recoverable taxes	1,475	917	672	664	463
Advances to suppliers	422	504	794	483	268
Other current assets	1,484	1,817	748	661	671
<b>Total current assets</b>	<b>19,426</b>	<b>17,434</b>	<b>10,322</b>	<b>14,326</b>	<b>12,526</b>
Property, plant and equipment, net	37,020	30,805	18,224	19,179	19,237
Investments in non-consolidated companies and other investments	1,862	1,173	334	499	530
Other assets:					
Accounts receivables, net	411	528	369	476	359
Advances to suppliers	580	416	450	403	496
Petroleum and Alcohol Account-Receivable from the Federal government <sup>(1)</sup>	282	239	182	81	1,509
Government securities	326	283	176	665	3,542
Unrecognized pension obligation			61	187	333
Restricted deposits for legal proceedings and guarantees	699	543	290	337	230
Recoverable taxes	536	467	156	164	
Investments PEPSA and PELSA			1,073		
Goodwill	211	183			
Prepaid expenses	271	190	100	78	42
Marketable securities	313	806	208	212	30
Fair value asset of gas hedge	635				
Others	510	545	209	257	302
<b>Total other assets</b>	<b>4,774</b>	<b>4,200</b>	<b>3,274</b>	<b>2,860</b>	<b>6,843</b>
<b>Total assets</b>	<b>\$ 63,082</b>	<b>\$ 53,612</b>	<b>\$ 32,154</b>	<b>\$ 36,864</b>	<b>\$ 39,136</b>
<b>Liabilities and Shareholders equity</b>					
Current liabilities:					
Trade accounts payable	\$ 3,284	\$ 2,261	\$ 1,702	\$ 1,783	\$ 2,011
Taxes payable	2,569	2,305	1,801	2,145	1,616
Short-term debt	547	1,329	671	1,101	3,128
Current portion of long-term debt	1,199	1,145	727	940	952
Current portion of project financings	1,313	842	239	680	565
Current portion of capital lease obligations	266	378	349	298	236
Dividends and interest on capital payable	1,900	1,955	307	93	6
Payroll and related charges	618	581	283	333	289
Advances from customers	290	258	119	26	55
Employees postretirement benefits obligations Pension	166	160	89	117	454
Other current liabilities	1,176	823	976	528	328
<b>Total current liabilities</b>	<b>13,328</b>	<b>12,037</b>	<b>7,263</b>	<b>8,044</b>	<b>9,640</b>

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Long-term liabilities:					
Long-term debt	12,145	11,888	6,987	5,908	4,833
Project financings	4,399	5,066	3,800	3,153	2,056
Employees postretirement benefits obligations Pension	2,915	1,895	1,363	1,971	2,854
Employees postretirement benefits obligation Health Care	2,137	1,580	1,060	1,409	1,465
Capital lease obligations	1,069	1,242	1,907	1,930	1,370
Deferred income tax	1,558	1,122	259	717	1,722
Thermoelectric liabilities	1,095	1,142			
Deferred Purchase Incentive	153				
Provision for abandonment of wells	403	396			
Other liabilities	497	541	350	406	338
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total long-term liabilities	26,371	24,872	15,726	15,494	14,638
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Minority interest	877	367	(136)	79	153
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
<b>Shareholders equity</b>					
Shares authorized and issued:					
Preferred share	4,772	2,973	2,459	1,882	1,882
Common share	6,929	4,289	3,761	2,952	2,952
Capital reserve and other comprehensive income	10,805	9,074	3,081	8,413	9,871
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total Shareholders equity	22,506	16,336	9,301	13,247	14,705
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total liabilities and Shareholders equity	\$ 63,082	\$ 53,612	\$ 32,154	\$ 36,864	\$ 39,136
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>

- (1) Prior to July 29, 1998, the Petroleum and Alcohol Account reflected the difference between our actual cost for imported crude oil and oil products and the price set by the Brazilian government, as well as the net effects on us of the administration of certain subsidies and of our fuel alcohol activities. 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. As from the price deregulation on January 2, 2002, the Petroleum and Alcohol Account reflected only the outstanding balance owed to us by the Brazilian government and adjustments resulting from monetary correction and audits to the Account. See Item 4. Information on the Company Regulation of the Oil and Gas Industry in Brazil Price Regulation The Petroleum and Alcohol Account.

**Table of Contents****INCOME STATEMENT DATA**

For the Year Ended December 31,

	2004	2003	2002	2001	2000
(in millions of U.S. dollars, except for share and per share data)					
Sales of products and services	\$ 51,954	\$ 42,690	\$ 32,987	\$ 34,145	\$ 35,496
Value-added and other taxes on sales and services	(11,882)	(9,644)	(7,739)	(8,627)	(8,829)
CIDE(1)	(2,620)	(2,249)	(2,636)		
Specific parcel price PPE(2)				(969)	288
Net operating revenues	37,452	30,797	22,612	24,549	26,955
Cost of sales(3)	20,303	15,416	11,506	12,807	13,449
Depreciation, depletion and amortization(4)	2,481	1,785	1,930	1,729	2,022
Exploration, including exploratory dry holes(4)(5)	613	512	435	404	440
Selling, general and administrative expenses	2,901	2,091	1,741	1,751	1,450
Other operating expense(6)	572	597	222	277	189
Total costs and expenses	26,870	20,401	15,834	16,968	17,550
Financial income	911	602	1,142	1,375	1,113
Financial expense	(1,733)	(1,247)	(774)	(808)	(909)
Monetary and exchange variation on monetary assets and liabilities, net	450	509	(2,068)	(915)	(575)
Employee benefit expense	(650)	(595)	(451)	(594)	(370)
Other non-operating income (expense), net(7)	(625)	(892)	(1,395)	(1,847)	(861)
Income before income taxes, minority interest and accounting change	8,935	8,773	3,232	4,792	7,803
Income tax (expense) benefit:					
Current	(2,114)	(2,599)	(1,269)	(1,196)	(1,574)
Deferred	(117)	(64)	116	(193)	(949)
Total income tax expense	(2,231)	(2,663)	(1,153)	(1,389)	(2,523)
Minority interests in results of consolidated subsidiaries	(514)	(248)	232	88	62
Income before effect of change in accounting principle	6,190	5,862	2,311	3,491	5,342
Cumulative effect of change in accounting principle, net of taxes(4)		697			
Net income for the year	\$ 6,190	\$ 6,559	\$ 2,311	\$ 3,491	\$ 5,342
Weighted average number of shares Outstanding:(8)					
Common/ADS	634,168,418	634,168,418	634,168,418	634,168,418	634,168,418
Preferred/ADS	462,369,507	461,379,749	451,935,669	451,935,669	451,935,669
Basic and diluted earnings per share:					



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Common/ADS(9)	\$	5.65	\$	5.99	\$	2.13	\$	3.21	\$	4.92
Preferred/ADS(9)		5.65		5.99		2.13		3.21		4.92
Cash dividends per share(10):										
Common/ADS	\$	1.73	\$	1.78	\$	1.19	\$	1.62	\$	0.45
Preferred/ADS		1.73		1.78		1.19		1.62		0.45

- (1) CIDE is a per-transaction tax due to the federal government.
  
- (2) According to specific legislation applicable to the Petroleum and Alcohol Account through 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 Brazilian Government, and the corresponding realization prices for such products, which is the basis for calculation net operating revenues. The realization prices (PR) for each oil product 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 oil products quotations on the international market and the exchange rate. When the invoicing price net of ICMS and PASEP/COFINS 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 ICMS and PASEP/COFINS was less than the realization price, the PPE collection was negative and increased the balance of the Petroleum and Alcohol Account. See Item 4. Information on the Company Regulation of the Oil and Gas Industry in Brazil Price Regulation The Petroleum and Alcohol Account.
  
- (3) Amounts reported are net of impact of government charges and taxes of U.S.\$68 million in 2001 and a credit of U.S.\$19 million in 2000. The governmental regulations giving rise to such charges/credits and taxes were abolished in 2002.
  
- (4) In 2002, U.S.\$284 million in abandonment costs were recognized as depreciation, depletion and amortization in accordance with SFAS 19. In 2003, as a result of our adoption of SFAS 143 - Accounting for Asset Retirement Obligations, depreciation on the asset retirement obligation was recorded under depreciation, depletion and amortization, while accretion expense was recorded under exploration, including exploratory dry holes. This change resulted in U.S.\$43 million in abandonment costs being recognized as exploration, including exploratory dry holes in 2003. The cumulative effect of adoption is recorded separately.
  
- (5) In 2004, we reviewed and revised our estimated costs associated with well abandonment and the demobilization of oil and gas production areas, considering new information about date of expected abandonment and revised cost estimates to abandon. The changes to estimated asset retirement obligation were principally related to changing expectations about Brent prices, which led the correlated fields to have longer economic lives. This review resulted in a decrease in the related provision of US\$ 196 million with a gain recognized in net income, and recorded in the line titled exploratory costs for oil and gas exploration. See note 2(i) to our audited consolidated financial statements.
  
- (6) Amounts reported are net of impact of government charges and taxes of U.S.\$45 million in 2001 and U.S.\$81 million in 2000. The governmental regulations giving rise to such charges and taxes were abolished in 2002.
  
- (7) Amounts reported include financial charges in respect of the Petroleum and Alcohol Account of U.S.\$2 million in 2002, U.S.\$16 million in 2001 and U.S.\$35 million in 2000.
  
- (8) On April 24, 2000, our board of directors authorized a 1 for 100 reverse stock split effective May 23, 2000.

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- (9) Basic and diluted earnings per share for 2003 reflect our adoption of SFAS 143. That change in accounting principle altered our 2003 basic and diluted earnings per share from 5.35 (before effect of change in accounting principle) to 5.99 (after effect of change in accounting principle).
  
- (10) Represents dividends declared in respect of the earnings of each period.

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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, 2004 have been derived from PIFCo's audited consolidated financial statements, which were audited by Ernst & Young Auditores Independentes S/S for each of the years ended December 31, 2004 and 2003 and by PricewaterhouseCoopers Auditores Independentes for each of the years ended December 31, 2002, 2001 and 2000. The information below should be read in conjunction with, and is qualified in its entirety by reference to, PIFCo's audited consolidated financial statements and the accompanying notes and Item 5. Operating and Financial Review and Prospects.

	<b>For the Year Ended December 31,</b>				
	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
	(in millions of U.S. dollars)				
<b>Income Statement Data:</b>					
<b>Sales of crude oil and oil products and Services:</b>					
Related Parties	\$ 10,118.4	\$ 5,543.0	\$ 5,375.5	\$ 5,860.6	\$ 7,573.3
Others	2,237.2	1,432.5	1,014.7	399.9	363.7
Lease income(1)			36.1	10.7	
	<u>12,355.6</u>	<u>6,975.5</u>	<u>6,426.3</u>	<u>6,271.2</u>	<u>7,937.0</u>
<b>Operating Expenses:</b>					
Cost of sales					
Related Parties	(4,391.3)	(2,851.4)	(2,409.0)	(1,648.1)	(1,341.5)
Others	(7,844.7)	(4,068.7)	(3,962.5)	(4,604.9)	(6,571.1)
Lease expense(1)			(24.0)	(10.5)	
Selling, general and Administrative expenses					
Related parties	(98.7)	(17.1)			
Others	(1.1)	(1.5)	(1.2)	(0.1)	
	<u>(12,335.8)</u>	<u>(6,938.7)</u>	<u>(6,396.7)</u>	<u>(6,263.6)</u>	<u>(7,912.6)</u>
Operating income	19.8	36.8	29.6	7.6	24.4
Financial income(2)					
Related Parties	568.6	401.7	201.9	155.4	217.4
Others	110.2	41.2	17.7	3.4	4.2
Total	678.8	442.9	219.6	158.8	221.6
Financial expense(3)					
Related Parties	(169.0)	(111.9)	(61.3)	(67.4)	(153.1)
Others	(592.2)	(370.8)	(253.4)	(119.7)	(66.6)
Total	(761.2)	(482.7)	(314.7)	(187.1)	(219.7)
Gain on materials and equipment				0.4	
Other income, net					
Related Parties	(0.5)				
Others	4.0				
Net income (loss)	\$ (59.1)	\$ (3.0)	\$ (65.5)	\$ (20.3)	\$ 26.3
<b>Balance Sheet Data (end of period):</b>					
Cash and cash Equivalents	\$ 1,107.3	\$ 664.2	\$ 260.6	\$ 48.6	\$ 51.2

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Trade accounts receivable					
Related parties	7,788.1	5,064.5	4,837.1	2,583.7	3,011.2
Others	153.2	109.4	57.1	44.7	39.6
Notes receivable					
Related parties	1,936.9	1,726.4	1,631.6	283.0	
Export Prepayment					
Related parties	1,414.7	1,479.4	751.2	751.2	
Marketable Securities					
	1,864.8	615.8	96.3		
Total assets	14,670.2	10,196.6	8,697.3	4,277.8	3,244.5
Trade accounts payable					
Related parties	562.1	271.0	292.0	288.1	70.8
Other	568.1	349.0	281.1	231.0	593.2
Notes payable					

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	For the Year Ended December 31,				
	2004	2003	2002	2001	2000
	(in millions of U.S. dollars)				
Related parties	6,435.0	2,442.8	3,688.2	334.6	1,716.6
Short-term financing and current portion of long-term debt	680.9	1,076.4	367.5	990.4	530.4
Long-term debt	6,151.8	5,825.3	3,248.7	2,335.0	245.0
Capital lease obligations			601.7		
Total stockholders' equity	35.7	94.8	43.9	49.4	9.7
Total liabilities and stockholders' equity	14,670.2	10,196.6	8,697.3	4,277.8	3,244.5

- (1) As a result of PIFCo's transfer of PNBV, its leasing subsidiary, to us in January 2003, PIFCo had no lease income or lease expense in 2003 and 2004.
- (2) Financial income represents primarily the imputed interest realized from PIFCo's sales of crude oil and oil products to us.
- (3) Financial expense consists primarily of costs incurred by PIFCo in financing its activities in connection with the importation by us of crude oil and oil products.

**Exchange Rates**

Until March 14, 2005, there were two principal foreign exchange markets in Brazil, the commercial rate exchange market and the floating rate exchange market. The National Monetary Council enacted Resolution No. 3.265, dated March 4, 2005, consolidating both exchange markets in one single Foreign Exchange Market, effective as of March 14, 2005. Before this recent unification of the markets, the commercial rate exchange market and the floating rate exchange market practiced similar prices and had similar liquidity but were subject to different regulation. Most trade and financial transactions were carried out on the commercial rate exchange market, including 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 were generally carried out on the floating rate exchange market.

All foreign exchange transactions are now carried out in the unified foreign exchange market. Foreign currencies may only be purchased through Brazilian financial institutions authorized to operate in such market and are subject to registration with the Central Bank electronic system. Foreign exchange rates continue to be freely negotiated, but may be influenced by Central Bank intervention. The Central Bank of Brazil allows the *real*/U.S. dollar exchange rate to float freely, and it has intervened occasionally to control unstable movements in foreign exchange rates. We cannot predict whether the Central Bank or the Brazilian government will continue to let the *real* float freely or will intervene in the exchange rate market through a currency band system or otherwise.

The Real depreciated 52.3% in 2002 against the U.S. dollar, before appreciating 18.2% in 2003 and continuing to appreciate 8.1% in 2004. As of June 23, 2005, the Real has appreciated to R\$2.3932 per U.S.\$1.00, representing an appreciation of approximately 9.8% in 2005 year-to-date. The Real may depreciate or appreciate substantially in the future. Risk Factors Risks Relating to Brazil.

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The following table provides information on the selling exchange rate, expressed in *reais* per U.S. dollar (R\$/US\$), for the periods indicated. The table uses the commercial selling rate prior to March 14, 2005.

	For the Year Ended December 31, (R\$ /U.S.\$ )			
	High	Low	Average (1)	Period End
<b>Year ended December 31,</b>				
2004	3.205	2.654	2.926	2.654
2003	3.662	2.822	3.075	2.889
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
<b>Month</b>				
December 2004	2.787	2.654	2.721	2.654
January 2005	2.722	2.625	2.690	2.625
February 2005	2.632	2.562	2.600	2.595
March 2005	2.762	2.601	2.705	2.666
April 2005	2.660	2.520	2.582	2.531
May 2005	2.531	2.378	2.452	2.404
June 2005 (through June 23)	2.489	2.370	2.427	2.393

Source: Central Bank of Brazil

- (1) Year-end figures stated for calendar years 2004, 2003, 2002, 2001 and 2000 represent the average of the month-end exchange rates during the relevant period. The figures provided for the months of calendar year 2005, as well as for the month of June up to and including June 23, 2005, 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**

*Substantial or extended declines in the prices of crude oil and oil products may have a material adverse effect on our income.*

A significant amount of our revenue is derived from sales of crude oil and oil products. We do not, and will not, have control over the factors affecting international prices for crude oil and oil products. The average prices of Brent crude, an international benchmark oil, were approximately U.S.\$38.21 per barrel for 2004, U.S.\$28.84 per barrel for 2003 and U.S.\$25.02 per barrel for 2002. Changes in crude oil prices

typically result in changes in prices for oil products.

Historically, international prices for crude oil and oil products have fluctuated widely as a result of many factors. These factors include:

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

the ability of the Organization of Petroleum Exporting Countries (OPEC) and other crude oil producing nations to set and maintain crude oil production levels and prices;

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

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global conflicts and acts of terrorism.

We expect continued volatility and uncertainty in international prices for crude oil and oil products. Substantial or extended declines in international crude oil prices may have a material adverse effect on our business, results of operations and financial condition, and the value of our proved reserves. In addition, significant decreases in the price of crude oil may cause us to reduce or alter the timing of our capital expenditures, and this could adversely affect our production forecasts in the medium term and our reserve estimates in the future.

***Our ability to achieve our growth objectives depends on our ability to discover additional reserves and successfully develop them, and failure to do so could prevent us from achieving our long-term goals for growth in production.***

Our ability to achieve our growth objectives is highly dependent upon our ability to discover additional reserves, as well as to successfully develop current reserves. In addition, our exploration activities expose us to the inherent risks of drilling, including the risk that we will not discover commercially productive crude oil or natural gas reserves. The costs of drilling wells are often uncertain, and numerous factors beyond our control (such as unexpected drilling conditions, equipment failures or accidents and shortages or delays in the availability of drilling rigs and the delivery of equipment) may cause drilling operations to be curtailed, delayed or cancelled. These risks are heightened when we drill in deep water (between 300 and 1500 meters) and ultra deep water (above 1500 meters). Deep water drilling represented approximately 56.6% of the exploratory wells drilled in 2004, a higher proportion than for many other oil and gas producers.

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. If we fail to gain access to additional reserves we may not achieve our long-term goals for production growth and our results of operations and financial condition may be adversely affected.

***Our crude oil and natural gas reserve estimates involve some degree of uncertainty and may prove to be incorrect over time, which could adversely affect our ability to generate income.***

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 uncertainties in estimating quantities of proved reserves related to prevailing crude oil and natural gas prices applicable to our production, which may lead us to make revisions to our reserve estimates. Downward revisions in our reserve estimates could lead to lower future production, which could have an adverse effect on our results of operations and financial condition.

***We are subject to numerous environmental and health regulations that have become more stringent in the recent past and may result in increased liabilities and increased capital expenditures.***

Our activities 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, both in Brazil and in other jurisdictions in which we operate. In Brazil, we could be exposed to administrative and criminal sanctions, including warnings, fines 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. In 2004, we experienced spills totaling 140,000 gallons of crude oil, as compared to 73,000 gallons in 2003 and 52,000 gallons in 2002. As a result of certain



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of these spills, we were fined by various state and federal environmental agencies, named the defendant in several civil and criminal suits and remain subject to several investigations and potential civil and criminal liabilities. Waste disposal and emissions regulations 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 e dos Recursos Naturais Renováveis* (Brazilian Institute of the Environment and Renewable Natural Resources, or IBAMA) routinely inspects our oil platforms in the Campos Basin, and may impose fines, restrictions on operations or other sanctions in connection with its inspections. In addition, we are subject to environmental laws that require

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us to incur significant costs to remedy any damage that a project may cause to the environment (*compensação ambiental*). These additional costs may have a negative impact on the profitability of the projects we intend to implement or may make such projects economically unfeasible.

As environmental regulations become more stringent, it is probable that our capital expenditures for compliance with environmental regulations and to effect improvements in our health, safety and environmental practices will increase substantially in the future. Because our capital expenditures are subject to approval by the Brazilian government, increased expenditures to comply with environmental regulations could result in reductions in other strategic investments. Any such reduction may have a material adverse effect on our results of operations or financial condition.

*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. These claims involve substantial amounts of money and other remedies. Several individual disputes account for a significant part of the total amount of claims against us. For example, on the grounds that drilling and production platforms may not be classified as sea-going vessels, the Brazilian Revenue Service asserted that overseas remittances for charter payments should be reclassified as lease payment and subject to a withholding tax of 25%. They have filed two tax assessments against us in the aggregate amount of R\$3,157 million (approximately U.S.\$1,098 million). See Item 8. Financial Information Legal Proceedings. In addition, recent changes in Brazilian laws relating to retirement benefits affecting our employees may increase our exposure to labor litigation in the future.

In the event that claims involving a material amount and for which we have no provisions were to be decided against us, or in the event that the losses estimated turn out to be significantly higher than the provisions 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 could result in restrictions on our operations and have a material adverse effect on certain of our businesses.

*If a State of Rio de Janeiro enforces a law imposing ICMS on oil upstream activities, our results of operations and financial condition may be adversely affected.*

In June 2003, the State of Rio de Janeiro enacted a law, referred to as Noel Law, imposing the Imposto sobre Circulação de Mercadorias e Serviços (state sales tax, or ICMS) on upstream activities. Although the law is technically in force, the government of the State of Rio de Janeiro has yet to enforce it. Currently, the ICMS for fuels derived from oil is assessed at the point of sale but not at the wellhead level. If the State of Rio de Janeiro enforces the law, it is unlikely that the other states would allow us to use the tax imposed at the wellhead level in Rio de Janeiro as a credit to offset the tax imposed at the sale level. Therefore, we would have to pay ICMS at both levels. The constitutionality of this law is currently being challenged at the Brazilian Supreme Court. If the law is declared constitutional and the State of Rio de Janeiro enforces the law against us, we estimate that the amount of ICMS that we would be required to pay to the State of Rio de Janeiro could increase by approximately R\$5.85 billion (U.S.\$2 billion) per year. This increase could have a material adverse effect on our results of operations and financial condition.

*Our participation in the domestic power market has generated losses and may not become profitable.*

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Consistent with the global trend of other major oil and gas companies and to secure demand for our natural gas, we participate in 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 has been slow. We have invested in 12 (ten in operation and two under construction or development) 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 Termoeletricidade* (Thermoelectric Priority Program, or PPT). Demand for energy produced by our thermoelectric plants has been lower than we expected mainly as a

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result of good hydrological conditions in the last years that increased the supply and lowered the prices of energy from hydroelectric power plants.

In 2002, the Brazilian Congress passed a law increasing government intervention in the domestic power market, and in 2003 the current administration proposed a new regulatory model for the energy sector. Although the new model for the energy sector creates certain incentives for investments in power generation, the changes implemented by it have not reduced our risks of losses. See Item 4. Information on the Company Natural Gas and Power New Regulatory Model.

Our participation in the domestic power market has generated losses and may not become profitable and it may continue to adversely affect our operating results and financial condition.

*We may not be able to obtain financing for all of our planned investments, and failure to do so could adversely affect our operating results and financial condition.*

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. If we cannot obtain financing that does not require Brazilian government approval, such as structured financings, 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 operating results and financial condition may be adversely affected.

*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 80% 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 2004 we imported U.S.\$6.9 billion of crude oil and oil products, the prices of which were all denominated in U.S. dollars.

The Real depreciated 52.3% in 2002 against the U.S. dollar before appreciating 18.2% and 8.1% against the U.S. dollar in 2003 and 2004, respectively. As of June 23, 2005, the exchange rate of the Real to the U.S. dollar was R\$2.3932 per U.S.\$1.00, representing an appreciation of approximately 9.8% in 2005 year-to-date. The value of the Real in relation to the U.S. dollar may continue to fluctuate and may include a significant depreciation of the Real against the U.S. dollar as occurred in 2002. Any future substantial devaluation of the Real may adversely affect our operating cash flows and our ability to meet our foreign currency-denominated obligations.

*We are exposed to increases in prevailing market interest rates, which leaves us vulnerable to increased financing expenses.*

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As of December 31, 2004, approximately 55% of our total indebtedness consisted of floating rate debt. We have not 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, which could have a material adverse effect on our results of operations and financial condition.

***We are not insured against business interruption for our Brazilian operations and most of our assets are not insured against war and terrorism.***

We do not maintain coverage for business interruption for our Brazilian operations, and as a result, we could suffer losses that could have a material adverse effect on our financial condition or results of operations. 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. In addition, we do not insure most of our assets against war and terrorism. A terrorist attack

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or an operational incident causing an interruption of our business could therefore have a material adverse effect on our financial condition or results of operations.

*We are subject to substantial risks relating to our international operations, in particular in Latin America and the Middle East.*

We operate in a number of different countries, particularly in Latin America and the Middle East that can be politically, economically and socially unstable. The results of operations and financial condition of our subsidiaries in these countries may be adversely affected by fluctuations in their local economies, political instability and governmental actions relating to the economy, including:

the imposition of exchange or price controls;

the imposition of restrictions on hydrocarbon exports;

the devaluation of local currencies; or

increases in export tax rates for crude oil and oil products.

If one or more of the risks described above were to materialize we may not achieve our strategic objectives in these countries or in our international operations as a whole, resulting in a material adverse effect on our results of operations and financial condition.

Of the countries in which we operate, our operations in Argentina are the most significant, representing approximately 5.6% of our total crude oil and natural gas production and 3.3% of our proved crude oil and natural gas reserves at December 31, 2004. In response to the Argentine crisis, the Argentine government has made a number of changes in the regulatory structure, including increasing government control over the price structure of many industries, such as the oil and gas sector. In addition, our operations in Bolivia represented approximately 2.3% of our total production in barrels of oil equivalent and 2.8% of our proved crude oil and natural gas reserves at December 31, 2004. Recent political unrest in Bolivia has targeted foreign companies' participation in Bolivia's natural gas industry, which resulted in a significant increase in royalties and taxes in May 2005 and calls by some groups for nationalization of the energy industry. Protests by opposition groups eventually led to the resignation of President Carlos Mesa in June 2005, after a mere 19 months in office. The Bolivian political, economic and social situation, generally, and the country's energy policy, in particular, remains extremely volatile and unpredictable. Future policy decisions in Argentina and Bolivia may adversely affect our investments in each country. A deterioration in the situation of Argentina and Bolivia may have a material adverse effect on our results of operation and financial condition.

## **Risks Relating to PIFCo**

*PIFCo may not earn enough money from its own operations to meet its debt obligations.*

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PIFCo is a direct wholly-owned subsidiary of Petrobras incorporated in the Cayman Islands as an exempted company with limited liability. Accordingly, PIFCo's financial position and results of operations are largely affected by our decisions, as its parent company. PIFCo has limited operations consisting principally of the purchase of crude oil and oil products from third parties and the resale of those products to us, with financing for such operations provided by us as well as third-party credit providers. PIFCo also buys and sells crude oil and oil products from and to third parties on a limited basis. PIFCo's ability to pay interest, principal and other amounts due on its outstanding and future debt obligations will depend upon a number of factors, including:

our financial condition and results of operations;

the extent to which we continue to use PIFCo's services for market purchases of crude oil and oil products;

our willingness to continue to make loans to PIFCo and provide PIFCo with other types of financial support;

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PIFCo's ability to access financing sources, including the international capital markets and third-party credit facilities; and

PIFCo's ability to transfer its financing costs to us.

In the event of a material adverse change in our financial condition or results of operations or in our financial support of PIFCo, PIFCo may not have sufficient funds to repay all amounts due on its indebtedness. See **Risks Relating to Our Operations** for a more detailed description of certain risks that may have a material adverse impact on our financial condition or results of operations and therefore affect PIFCo's ability to meet its debt obligations.

*If Brazilian law restricts us from paying PIFCo in U.S. dollars, PIFCo may have insufficient U.S. dollar funds to make payments on its debt obligations.*

PIFCo obtains substantially all of its funds from our payments in U.S. dollars for crude oil that we purchase from PIFCo. In order to remit U.S. dollars to PIFCo, we must comply with Brazilian foreign exchange control regulations, including preparing specified documentation to be able to obtain U.S. dollar funds for payment to PIFCo. If Brazilian law were to impose additional restrictions, limitations or prohibitions on our ability to convert Reais into U.S. dollars, PIFCo may not have sufficient U.S. dollar funds available to make payment on its debt obligations. Such restrictions could also have a material adverse effect on the Brazilian economy or our business, financial condition and results of operations.

*PIFCo may be limited in its ability to pass on its financing costs.*

PIFCo is principally engaged in the purchase of crude oil and oil products for sale to Petrobras, as described above. PIFCo regularly incurs indebtedness related to such purchases and/or obtain financing from us or third-party creditors. At December 31, 2004, approximately 15.5% of PIFCo's indebtedness was floating-rate debt denominated in U.S. dollars. All such indebtedness has the benefit of our standby purchase obligation or other support. PIFCo has historically passed on its financing costs to us by selling crude oil and oil products to us at a premium to compensate for its financing costs. Although we intend to continue this practice in the future, we cannot assure you that we will. PIFCo's inability to transfer its financing costs to us could have a material adverse effect on PIFCo's business and on its ability to meet its debt obligations on the long term.

## **Risks Relating to the Relationship between us and the Brazilian Government**

*The Brazilian government, as our controlling shareholder, may cause us to pursue certain macroeconomic and social objectives that may have an adverse effect on our results of operations and financial condition.*

The Brazilian government, as our controlling shareholder, has pursued, and may pursue in the future, certain of its macroeconomic and social objectives through us. 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 objectives of the Brazilian government rather than to our own economic and business objectives. In particular, we continue to assist the Brazilian



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government to ensure that the supply of crude oil and oil products in Brazil meets Brazilian consumption requirements. Accordingly, we may make investments, incur costs and engage in sales on terms that may have an adverse effect on our results of operations and financial condition.

*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, 2004 was U.S.\$282 million. All price controls for crude

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oil and oil products ended on January 2, 2002, however, 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.

*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. 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.

## **Risks Relating to Brazil**

*The Brazilian government has historically exercised, and continues to exercise, significant influence over the Brazilian economy. Brazilian political and economic conditions have a direct impact on our business and may have a material adverse effect on our results of operations and financial condition.*

The Brazilian government's economic policies may have important effects on Brazilian companies, 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.

***Inflation and government measures to curb inflation may contribute significantly to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and, consequently, may adversely affect the market value of our securities, financial condition and results of operations.***

Our principal market is Brazil, which has, in the past, 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 and to 5.3% in 2000. The same index increased to 9.4% during 2001 and to 14.7% in 2002, before decreasing to 10.4% in 2003 and to 6.1% in 2004.

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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, which may adversely affect our results of operations and financial condition.

*Access to international capital markets for Brazilian companies is influenced by the perception of risk in Brazil and other emerging economies, which may hurt our ability to finance our operations and the trading values of our securities.*

International investors generally consider Brazil to be an emerging market. As a result, economic and market conditions in other emerging market countries, especially those in Latin America, influence the market for securities issued by Brazilian companies. As a result of economic problems in various emerging market countries in recent years (such as the Asian financial crisis of 1997, the Russian financial crisis in 1998 and the Argentine financial crisis that began in 2001), investors have viewed investments in emerging markets with heightened caution. These crises produced a significant outflow of U.S. dollars from Brazil, causing Brazilian companies to face higher costs for raising funds, both domestically and abroad, and impeding access to international capital markets. Increased volatility in securities markets in Latin American and in other emerging market countries may have a negative impact on the trading value of our securities. We cannot assure you that international capital markets will remain open to Brazilian companies or that prevailing interest rates in these markets will be advantageous to us.

### **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 you may have greater difficulty selling 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.

*The market for PIFCo's notes may not be liquid.*

PIFCo's notes are not listed on any securities exchange and are not quoted through an automated quotation system. We can make no assurance as to the liquidity of or trading markets for PIFCo's notes. We cannot guarantee that the holders of PIFCo's notes will be able to sell their notes in the future. If a market for PIFCo's notes does not develop, holders of PIFCo's notes may not be able to resell the notes for an extended period of time, if at all.

*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

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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 of Petrobras Preemptive Rights.

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*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. We cannot predict whether an active liquid public trading market for our ADSs will be sustained on the New York Stock Exchange, where they are currently traded. 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. 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, including standby purchase agreements we have entered into in support of PIFCo's notes.*

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 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 forfeiting 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 São Paulo Stock Exchange. In addition, if you do not obtain a certificate of registration or register under Resolution No. 2,689, you may be subject to less favorable tax treatment on gains with respect to the common or preferred shares.

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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 and we cannot assure you 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.

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*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 Corporation 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, which are derivative of the rights of holders of our common or preferred shares, as the case may be, to protect your interests against actions by our board of directors may be fewer and less well-defined under Brazilian Corporation Law 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 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 greater difficulties in protecting your interest in 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 represents 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 of Petrobras Voting Rights for a discussion of the limited voting rights of our preferred shares.

*Enforcement of our obligations under the standby purchase agreement might take longer than expected.*

We have entered into standby purchase agreements in support of PIFCo's obligations under its notes and indentures. Our obligation to purchase from the PIFCo noteholders any unpaid amounts of principal, interest and other amounts due under the PIFCo notes and the indenture applies, subject to certain limitations, irrespective of whether any such amounts are due at maturity of the PIFCo notes or otherwise. See Additional Information PIFCo Senior Notes Standby Purchase Agreements and Additional Information PIFCo Global Notes Standby Purchase Agreements.

We have been advised by our counsel that the enforcement of the standby purchase agreement in Brazil against us, if necessary, will occur under a form of judicial process that, while similar, has certain procedural differences from those applicable to enforcement of a guarantee and, as a



result, the enforcement of the standby purchase agreement may take longer than would otherwise be the case with a guarantee.

***We may not be able to pay our obligations under the standby purchase agreement in U.S. Dollars.***

Payments by us to PIFCo for the import of oil, the expected source of PIFCo's cash resources to pay its obligations under the PIFCo notes, will not require approval by or registration with the Central Bank of Brazil. There may be other regulatory requirements that we will need to comply with in order to make funds available to PIFCo. If we are required to make payments under the standby purchase agreement, Central Bank of Brazil

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approval will be necessary. Any approval from the Central Bank of Brazil may only be requested when such payment is to be remitted abroad by us, and will be granted by the Central Bank of Brazil on a case-by-case basis. It is not certain that any such approvals will be obtainable at a future date. In case the PIFCo noteholders receive payments in Reais corresponding to the equivalent U.S. Dollar amounts due under PIFCo's notes, it may not be possible to convert these amounts into U.S. Dollars. We will not need any prior or subsequent approval from the Central Bank of Brazil to use funds we hold abroad to comply with our obligations under the standby purchase agreement.

*We would be required to pay judgments of Brazilian courts enforcing our obligations under the standby purchase agreement only in Reais.*

If proceedings were brought in Brazil seeking to enforce our obligations in respect of the standby purchase agreement, we would be required to discharge our obligations only in Reais. Under the Brazilian exchange control limitations, an obligation to pay amounts denominated in a currency other than Reais, which is payable in Brazil pursuant to a decision of a Brazilian court, may be satisfied in Reais at the rate of exchange, as determined by the Central Bank of Brazil, in effect on the date of payment.

*A finding that we are subject to U.S. bankruptcy laws and that the standby purchase agreement executed by us was a fraudulent conveyance could result in PIFCo noteholders losing their legal claim against us.*

PIFCo's obligation to make payments on the PIFCo notes is supported by our obligation under the standby purchase agreement to make payments on PIFCo's behalf. We have been advised by our external U.S. counsel that the standby purchase agreement is valid and enforceable in accordance with the laws of the State of New York and the United States. In addition, we have been advised by our general counsel, Mr. Nilton de Almeida Maia, that the laws of Brazil do not prevent the standby purchase agreement from being valid, binding and enforceable against us in accordance with its terms. In the event that U.S. federal fraudulent conveyance or similar laws are applied to the standby purchase agreement, and we, at the time we entered into the standby purchase agreement:

were or are insolvent or rendered insolvent by reason of our entry into the standby purchase agreement;

were or are engaged in business or transactions for which the assets remaining with us constituted unreasonably small capital; or

intended to incur or incurred, or believed or believes that we would incur, debts beyond our ability to pay such debts as they mature; and

in each case, intended to receive or received less than reasonably equivalent value or fair consideration therefor,

then our obligations under the standby purchase agreement could be avoided, or claims in respect of the standby purchase agreement could be subordinated to the claims of other creditors. Among other things, a legal challenge to the standby purchase agreement on fraudulent conveyance grounds may focus on the benefits, if any, realized by us as a result of PIFCo's issuance of these notes. To the extent that the standby purchase agreement is held to be a fraudulent conveyance or unenforceable for any other reason, the holders of the PIFCo notes would not have a claim against us under the standby purchase agreement and will solely have a claim against PIFCo. We cannot assure you that, after providing for all prior claims, there will be sufficient assets to satisfy the claims of the PIFCo noteholders relating to any avoided portion of the standby purchase agreement.

**ITEM 4. INFORMATION ON THE COMPANY**

**History and Development of Petrobras**

We are 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 also publicly traded. Our principal executive office is

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located at Avenida República do Chile, 65, 20035-900 - Rio de Janeiro - RJ, Brazil and our telephone number is (55-21) 3224-4477.

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 natural gas production and refining 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.

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.

Based upon our 2004 consolidated revenues, we are the largest corporation in Brazil and one of the largest oil and gas companies in Latin America. In 2004, we had sales of products and services of U.S.\$51,954 million, net operating revenues of U.S.\$37,452 million and net income of U.S.\$6,190 million.

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

**Exploration and Production** Our exploration and production segment encompasses exploration, development and production activities in Brazil.

**Refining, Transportation and Marketing** Our refining, transportation and marketing segment encompasses refining, logistics, transportation and the purchase of crude oil, as well as the purchase and sale of oil products and fuel alcohol. Additionally, this segment includes the petrochemical and fertilizers division, which includes investments in domestic petrochemical companies and our two domestic fertilizer plants.

**Distribution** Our distribution segment encompasses oil product and fuel alcohol distribution activities conducted by our majority owned subsidiary, Petrobras Distribuidora S.A. - BR in Brazil.

**Natural Gas and Power** Our natural gas and power segment encompasses the purchase, sale and transportation of natural gas produced in or imported into Brazil. Additionally, this segment includes our domestic electric energy commercialization activities as well as investments in domestic natural gas transportation companies, state owned natural gas distributors and thermal electric companies.

**International** Our international segment encompasses international activities conducted in 14 countries (Angola, Argentina, Bolivia, Colombia, Mexico, USA, Venezuela, Iran, Libya, Tanzania, Uruguay, Nigeria, Peru and Ecuador), which include Exploration and Production, Supply, Refining, Petrochemical, Distribution and Gas and Energy.

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Corporate Our corporate segment includes those activities not attributable to other segments, including corporate financial management, overhead related with central administration and other expenses, including pension and health care expenses.

### **Recent Developments relating to compliance with the Sarbanes-Oxley Act**

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, beginning with our Annual Report on Form 20-F for the fiscal year ending December 31, 2006, we will be required to furnish a report by our management on our internal control over financial reporting. This report will contain, among other matters, an assessment of the effectiveness of our internal controls over financial reporting as of the end of the fiscal year, including a statement as to whether or not our internal controls over financial reporting are effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management.

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The report will also contain a statement that our auditors have issued an attestation report on management's assessment of such internal controls. To comply with this requirement, we are creating a system of internal controls over financial reporting based on the recommendation of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), formed by accounting and auditing companies in the United States. The COSO system is expected to be the prevailing system adopted by companies subject to Section 404 of the Sarbanes-Oxley Act. The implementation of the COSO system is being conducted in five different levels with the participation of our chief financial officer and chief executive officer, our internal control committee formed by executive officers of our business areas, the managers of each of our business units, our internal auditors and our Board of Directors.

## **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 strong reserve base;

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 permit 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 substantially all of the country's refining capacity. Our average domestic daily production of crude oil and NGLs decreased 3.1% in 2004, as compared to an increase of 2.7% in 2003 and 12.3% in 2002.

### *Our strong reserve base*

As of December 31, 2004, we had estimated proved developed and undeveloped crude oil and natural gas reserves of approximately 11.82 billion barrels of 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, 2004, our worldwide proved reserves to production ratio was 16.9 years.

The majority of our reserves, including recent discoveries, are located in deep-water areas that generally require additional planning, more comprehensive evaluation and added lead time to begin production when compared to onshore production. In accordance with our strategic plan for the period from 2004 to 2010, or Strategic Plan, we have been investing the necessary capital to build the offshore platforms needed to monetize these reserves. Although our proved reserve life is higher than the industry average, the additional planning required to bring deep-water areas into production also means that our percentage of proved undeveloped reserves may be higher than the industry average.

We believe that our proved reserves will provide us with significant opportunities for sustaining and increasing production growth.

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### *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 9,842 feet (3,000 meters).

Our deepwater development and production expertise has allowed us to achieve high production volumes and relatively low lifting costs (excluding royalties, special government participation and rental of areas, which we refer to as "government take"). Our aggregate average lifting cost for crude oil and natural gas products in Brazil for 2004, excluding government take, increased to U.S.\$4.33 per barrel of oil equivalent, as compared to U.S.\$3.48 per barrel of oil equivalent for 2003. Including government take, our lifting costs increased to U.S.\$10.77 per barrel of oil equivalent for 2004, as compared to U.S.\$8.62 per barrel of oil equivalent for 2003.

### *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 1.7 million barrels per day and the Brazilian market total demand for hydrocarbon products of 1.8 million barrels per day as of December 2004.

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. At present, the demand for natural gas is limited, due in part to a distribution infrastructure that is still developing. The prices we realize for natural gas, which depend on the costs of other energy sources it can replace, are less than half of the current market price in the United States, where demand is more developed. The demand for natural gas in Brazil increased 22% in 2004, outpacing the 14% average increase in demand of the previous four years. Although we cannot be certain that natural gas demand will continue to grow at annual rates similar to previous years, we expect continued growth as significant investments in gas transportation pipelines begin operating.



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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 the 1,969 miles (3,150 kilometers) long Bolivia-Brazil natural gas pipeline;

increasing production of non-associated natural gas, and natural gas associated with our domestic crude oil production, combined with the necessary investments to process such gas from recent discoveries of non-associated gas reserves, mainly in the Santos Basin of Brazil;

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

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increased participation in the natural gas distribution market through investments in 20 of the 24 natural gas distribution companies in Brazil; and

investments in thermoelectric power plants, which serve as sources of demand for our natural gas.

*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 energy 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 areas where we have competitive advantages;

develop and improve systematic company-wide initiatives to address health, safety and environmental 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, while being socially and environmentally responsible and contributing to the development of Brazil and the other countries where we operate.

*Expand production while increasing reserves*

We seek to generate production growth from the continued development of our proved undeveloped reserve base of 6.2 billion barrels of oil equivalent at December 31, 2004, representing 52.1% of our total proved reserves. Our 2004-2010 budget contemplates capital expenditures of approximately U.S.\$53.6 billion in development activities for this seven-year period, including U.S.\$5.9 billion to be financed through project financings. The majority of these capital expenditures, U.S.\$32.1 billion, will be directed towards exploration and production activities, of which U.S.\$26.2 billion will be directed towards domestic exploration and production activities. We intend to increase our effort in production to produce lighter crude oil from our newly discovered reserves.

At the same time that we seek to expand production, we intend to increase our proved reserves, principally through exploration focused on deepwater exploration in Brazil. We have net exploration, development and production rights in 26.8 million acres (108,291 square kilometers) in Brazil. We expect to continue to participate

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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 South America, the Gulf of Mexico and the west coast of Africa. 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). In 2004, we participated in a tender for exploration blocks in Libya and Iran. At December 2004, we had exploration, development and production rights in 19.2 million gross and 9.7 million net acres (78,000 gross and 39,000 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 and meeting stricter quality standards.*

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

upgrade the technology of our refining operations to increase efficiency;

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

invest in our refineries to produce distillate products that meet international quality standards.

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

In the near term, we expect to expand internationally 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. We acquired exploration interests in Iran, Argentina, Colombia, in the Gulf of Mexico and Tanzania during 2004 and we have recently acquired an exploration interest in Libya.

*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, safety and environmental concerns and ensure compliance with environmental regulations, we have taken several measures, of which the most extensive is the *Programa de Excelência em Gestão Ambiental e Segurança Operacional* (Program for Excellence in Environmental Management and Operational Safety, or PEGASO). Through the program, we seek to improve technology, upgrade our pipelines, reduce emissions and wastes, improve our emergency response readiness and prevent environmental accidents. Another important initiative is the *Programa de Segurança de Processo* (Process Safety Program) that aims to strengthen our corporate commitment to safety through the implementation of standardized, company-wide health, safety and environmental guidelines. See Health, Safety and Environmental Initiatives.

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*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 and recent discoveries in the Santos 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 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 in 1997 and price deregulation in 2002, we have been preparing 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 transparency and accountability to shareholders, and 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;

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the Code of Good Practices, which institutes corporate policies for our directors and executive officers 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 Code of Competition Conduct, which is part of our effort to ensure that our commercial policies and practices comply with Brazilian competition laws;

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 for employees and executive officers.

As a foreign private issuer, we are exempt from many of the corporate governance standards the New York Stock Exchange, or NYSE, applies to U.S. domestic issuers listed on the NYSE. In accordance with Section

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303A.11 of the NYSE Listed Company Manual, we have posted a summary of significant differences between the NYSE standards and our corporate governance practice on our website, [www.petrobras.com.br](http://www.petrobras.com.br).

*Meet targeted operating costs and return on capital, while being socially and environmentally responsible and contributing to the development of Brazil and other countries where we operate.*

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.\$3.00 per barrel of oil equivalent in 2010 (excluding government take) as compared to U.S.\$4.33 per barrel of oil equivalent in 2004. 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 employed of 15% for 2010, assuming a price of U.S.\$23 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;

improve reservoir management technique; and

increasing gas sales transported through the Bolivia-Brazil pipeline and from our own associated gas production.

Up to now, these measures have not been effective in reducing our lifting costs, which have increased over the last three years, primarily because (1) approximately 60% of our lifting costs are denominated in Reais, which appreciated against the U.S. dollar by 18.2% and 8.1% in 2003 and 2004, respectively and (2) costs associated with oil field services tend to increase when the price of oil increases, which has occurred over the last few years. See Item 4. Information on the Company Exploration, Development and Production Production Activities.

## **Overview by Business Segment**

### **Exploration, Development and Production**

*Summary and Strategy*



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Our exploration and production segment includes exploration, development and production activities in Brazil. We began domestic production in 1954 and international production in 1972. As of December 31, 2004, our estimated net proved crude oil and natural gas reserves in Brazil were approximately 10.6 billion barrels of oil equivalent. Crude oil represented 87.5% and natural gas represented 12.5% of these reserves. Our proved reserves are located principally in the Campos Basin.

During 2004, our average daily domestic production was 1.5 million barrels per day of crude oil and NGLs and 1,590 billion cubic feet of natural gas per day. Our aggregate average lifting costs for crude oil and natural gas in 2004 were U.S.\$4.33 per barrel of oil equivalent in Brazil (excluding government take).

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. We refer to these concessions as Round O. 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.

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At December 31, 2004, we held 374 areas, representing 26.8 million net acres (108,291 square kilometers). We currently have joint venture agreements for exploration and production in Brazil with approximately 29 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;

accelerate production of recent discoveries of light crude oil and non-associated gas;

increase reserves through continued exploration;

improve our reservoir management;

reduce lifting costs; and

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

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*Principal Domestic Oil and Gas Producing Regions*

Our annual daily production in Brazil has generally grown over the years. In 1970, we produced 164 Mbpd of crude oil, condensate and natural gas liquids in Brazil. We increased production to 181 Mbpd in 1980, 654 Mbpd in 1990, 1,271 Mbpd in 2000 and 1,493 Mbpd in 2004, which represented a decrease from the 1,540 Mbpd produced in 2003. In describing our oil and gas producing regions, reservoirs refer to underground formations containing producible oil or gas. Fields are areas that contain one or more reservoirs. Blocks are sections of a sedimentary basin where we carry out oil and gas exploration and production activities.

Our main domestic oil and gas producing regions are:

Campos Basin

The Campos Basin is the largest oil and gas producing region, and covers approximately 28.4 million acres (115 thousand square kilometers). Since exploration activities in this area began in 1968, we discovered over 40 hydrocarbon reservoirs have been discovered in this region in a 6.3 thousand square kilometers concession area, 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 increased steadily for the past ten years until 2004. In 2004, Campos Basin's oil production decreased to 1,203.7 Mbpd from 1,252 Mbpd in 2003. Campos Basin's oil production accounted for approximately 80% of Brazilian oil production.

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At December 31, 2004, we produced crude oil from 31 fields in the Campos Basin and our proved crude oil reserves were 8.1 billion barrels, representing 81.4% of our total proved crude oil reserves. In 2004, the crude oil we produced in the Campos Basin had an average API gravity of 23.5° and an average water cut of 1.2%. We currently have 23 floating production systems, 13 fixed platforms and 3,643 kilometers of pipeline operating in 31 fields at water depths of 262 to 6,188 feet (80 - 1,886 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 20 blocks in the Santos Basin, with a combined acreage of 28.5 thousand square kilometers (as compared to 6.3 thousand square kilometers under concession in the Campos Basin). Current production of oil and natural gas is 11.0 Mboe per day in the Coral and Merluza fields.

Espírito Santo Basin

In partnership with Shell and Chevron Texaco, we have made several discoveries of heavy crude oil. We currently have exploration rights to 15 blocks in the Espírito Santo Basin, with a combined acreage of 5.7 thousand square kilometers. During 2004, we produced 40.9 Mboe per day of oil and natural gas in the Espírito Santo Basin (28.2 Mboe onshore and 12.7 Mboe offshore).

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 2004, we produced 116.1 Mboe per day of oil and natural gas in the Solimões Basin.

Properties

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

Production Acreage as of December 31, 2004		Average Oil and Natural Gas Production for the Year	Average Oil and Natural Gas Production for the Year
		Ended December 31,	Ended December 31,
Developed	Undeveloped	2004(1)(4)	2003(1)(4)

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	<u>Gross(2)</u>	<u>Net(2)</u>	<u>Gross(2)</u>	<u>Net(2)</u>		
	(in acres)				(boe per day) (3)	
<b>Brazil(1)</b>						
Offshore						
Campos Basin	1,713,862	1,699,778	138,868	116,877	1,311,208	1,361,909
Other offshore	313,566	276,254	290,586	262,170	68,909	70,625
Total offshore	2,027,428	1,976,032	429,454	379,047	1,380,117	1,432,534
Onshore	983,197	977,514	145,293	145,293	377,603	358,094
<b>Total Brazil</b>	<b>3,010,625</b>	<b>2,953,546</b>	<b>574,747</b>	<b>524,340</b>	<b>1,757,721</b>	<b>1,790,628</b>
<b>International</b>						
Onshore	4,350,462	2,758,355	2,818,124	2,156,637	247,122	227,206
Offshore	112,253	44,600	25,965	795	15,516	18,673
<b>Total International</b>	<b>4,462,714</b>	<b>2,802,955</b>	<b>2,844,089</b>	<b>2,157,432</b>	<b>262,639</b>	<b>245,879</b>
<b>Total</b>	<b>7,473,339</b>	<b>5,756,501</b>	<b>3,418,836</b>	<b>2,681,772</b>	<b>2,020,360</b>	<b>2,036,507</b>

- (1) Over 75% of our production of natural gas is associated gas.
- (2) A gross acre is an acre in which a working interest is owned. The number of gross acres is the total number of acres in which a working interest is owned. A net acre is deemed to exist when the sum of fractional ownership working interests in gross acres equals one. The number of net acres is the sum of the fractional working interests owned in gross acres expressed as hole numbers and fractions thereof.
- (3) See Conversion Table for the ratios used to convert cubic feet of natural gas to barrels of oil equivalent.
- (4) Includes production from shale oil reserves, natural gas liquids and reinjected gas volumes, which are not included in our proved reserves figures.

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The following table sets forth our total gross and net productive wells as of December 31, 2004:

	<u>Oil</u>	<u>Gas</u>	<u>Total</u>
Gross productive wells			
Brazil	8,804	405	9,209
International	5,593	398	5,991
Total	14,397	803	15,200
Net productive wells			
Brazil	8,793	399	9,192
International	4,766	337	5,103
Total	13,559	736	14,295

Productive wells are producing wells and wells capable of production. A gross well is a well in which a working interest is owned. The number of gross wells is the total number of wells in which a working interest is owned. A net well is deemed to exist when the sum of fractional ownership working interests in gross wells equals one. The number of net well is the sum of the fractional working interests owned in gross wells expressed as hole numbers and fractions thereof.

*Deepwater Expertise*

We are a leader in deepwater drilling, with recognized expertise in deepwater exploration, development and production. We have developed our expertise over many years and have achieved significant milestones, including the following:

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;

in January 2003, we drilled the world's second horizontal deepwater multilateral well in the Barracuda-Caratinga field, in Campos Basin, at an water depth of 2,999 feet (914 meters), consisting of two legs for each well;

at December 31, 2004, we were operating 30 wells at water depths in excess of 3,281 feet (1,000 meters); and

at December 31, 2004, we had drilled 422 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).

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:

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we have been more successful in finding and developing crude oil offshore, as a result of the existence of a larger number and size of oil reservoirs offshore as compared to onshore reservoirs and a 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 4.96:1 in 2004, 5.20:1 in 2003 and 5.18:1 in 2002.

We currently extract hydrocarbons from offshore wells in waters with depths of up to 6,188 feet (1,886 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 2004 and 2003.

**Table of Contents****OFFSHORE PRODUCTION BY WATER DEPTH**

Depth	Percentage in 2004	Percentage in 2003
0-400 meters (0-1,312 feet)	21%	21%
400-1,000 meters (1,312 feet-3,281 feet)	55%	58%
More than 1,000 meters (3,281 feet)	24%	21%

*Exploration Activities*

## Our Concessions in Brazil

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 (458.5 thousand square kilometers).

At December 31, 2004, we had 374 areas, consisting of 233 production areas, 96 exploration areas and 45 development areas, for a total area aggregating 37.8 million gross acres (153.1 thousand square kilometers). This total area represents 2.4% of the Brazilian sedimentary basins.

## Recent discoveries

During 2004, we discovered five new crude oil fields onshore, two of them in the Potiguar bay, and the other three in the states of Bahia, Alagoas and Espírito Santo. These discoveries were not significant as compared to our crude oil discoveries in 2003. As a result, during 2004 we focused our efforts on proving and developing the reserves discovered in 2003. During this process, we found reservoirs of light crude oil and gas in the Espírito Santo Basin in 2004. In the first quarter of 2005, we found reservoirs of light crude oil in the Santos Basin.

## Exploration bidding rounds

Since 1999, 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.

The following chart summarizes our success in the exploration bidding rounds conducted by the ANP during the last three years:



<b>Event</b>	<b><u>Exploration</u></b>	<b><u>Development</u></b>	<b><u>Production</u></b>	<b><u>Total</u></b>
<b>Areas held (December 31, 2001)</b>	55	41	233	329
Areas relinquished (May 2002) (BA-1)	(1)	0	0	(1)
Areas won on Bid, Round 4	8	0	0	8
Areas relinquished (August 6, 2002) (BM-CAL-1 and BM-C-6)	(2)	0	0	(2)
Areas relinquished (August 2002) (BS-2)	(1)	0	0	(1)
Areas relinquished (September 2002) (BES-2)	(1)	0	0	(1)
New concession (February 6, 2002) (Siri)	0	1	0	1
New concession (August 27, 2002) (Asa Branca)	0	1	0	1
New concession (November 22, 2002) (Manati)	0	1	0	1
New concession (December 11, 2002) (Jubarte)	0	1	0	1
New concession (December 27, 2002) (Cachalote)	0	1	0	1

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	<u>Exploration</u>	<u>Development</u>	<u>Production</u>	<u>Total</u>
<b>Event</b>				
Areas relinquished (March 13, April 24, 2002)	0	(1)	(4)	(5)
Areas redefined (April 26, May 10, August 6, August 10, October 9 and December 12, 2002)	0	(6)	6	0
Areas relinquished (Caraúna - PETROBRAS not operator)	0	0	(1)	(1)
<b>Areas held (December 31, 2002)</b>	<b>58</b>	<b>39</b>	<b>234</b>	<b>331</b>
Areas redefined (July 2003) (BCAM-40)	1	0	0	1
Areas relinquished (August 6, 2003)	(22)	0	0	(22)
Areas won on Bid, Round 5	17	0	0	17
New concession (January 29, 2003) (Guajá)	0	1	0	1
New concession (August 4, 2003) (Cavalo-Marinho)	0	1	0	1
Areas redefined (February 3, 2003) (Coral)	0	(1)	1	0
Areas redefined (July 15, 2003) (Beija-Flor)	0	(1)	1	0
Joint concession COG to CCN (1)	0	0	(1)	(1)
Joint concession CDL to MP (2)	0	0	(1)	(1)
Areas relinquished (BAS-104)	0	(1)	0	(1)
Areas relinquished (Arraia)	0	(1)	0	(1)
Joint concession CR to FZB	0	(1)	0	(1)
Areas relinquished (ALS-32)	0	(1)	0	(1)
<b>Areas held (December 31, 2003)</b>	<b>54</b>	<b>35</b>	<b>234</b>	<b>323</b>
Areas won on Bid, Round 6	36	0	0	36
Areas obtained through acquisitions (BT-REC-4, BT-POT-9, BT-ES-4, BM-C-14, BM-S-14 and BM-S-22)	6	0	0	6
Joint concession SMI to PJ	0	0	(1)	(1)
New concession (January 15, 2004) (Baleia Branca)	0	1	0	1
New concession (January 15, 2004) (Golfinho)	0	1	0	1
New concession (January 15, 2004) (Mexilhão)	0	1	0	1
New concession (January 19, 2004) (Azulão)	0	1	0	1
New concession (January 19, 2004) (Japim)	0	1	0	1
New concession (August 30, 2004) (Piranema)	0	1	0	1
New concession (December 20, 2004) (Baleia Anã)	0	1	0	1
New concession (December 20, 2004) (Baleia Azul)	0	1	0	1
New concession (December 20, 2004) (Baleia Bicuda)	0	1	0	1
New concession (December 22, 2004) (Salema Branca)	0	1	0	1
<b>Total areas held (as of December 31, 2004)</b>	<b>96</b>	<b>45</b>	<b>233</b>	<b>374</b>
Net area held in million acres (as of December 31, 2004)	23,302,081	516,185	2,939,956	26,758,222

(1) COG Córrego Grande, CCN Córrego Cedro Grande

(2) CDL Cardeal, MP Massapê

Joint Ventures

As of December 31, 2004, we had 65 exploration and development agreements with respect to our concessions with numerous oil and gas companies. Our percentage participation ranges from 20% to 90%, and in 44 of the 65 agreements, we are principally responsible for conducting the exploration and development activities. During 2004, we entered into 20 partnership projects relating to exploration activities. As of December 31, 2004, we had partnerships with 29 foreign and domestic companies. The exploration and development activities we conduct through joint ventures do not represent a material percentage of our total exploration and development activities.

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*Drilling Activities*

During 2004, we drilled a total of 355 wells, 279 development wells and 76 exploratory wells. Of those wells, 211 development wells and 27 exploratory wells were located onshore and 68 development wells and 49 exploratory wells were located offshore. We plan to drill 440 new development wells during 2005. These numbers refer to the wells we drilled in 2004, but such wells may not have been evaluated or reclassified in 2004. The table *Exploratory and Development Wells* below indicates the number of wells which were evaluated and reclassified in 2004.

We plan to expand our exploration and development activities in 2005 by:

drilling approximately 75 new exploratory and approximately 440 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			International	
		Campos Basin	Other	Onshore		
<b>2004</b>	<b>Net Exploratory Wells Drilled</b>	21	19	14	7	61
	Successful	16	9	4	2	31
	Unsuccessful	5	10	10	5	30
	<b>Net Development Wells Drilled</b>	25	2	208	235	470
	Successful	24	2	205	230	461
	Unsuccessful	1	0	3	5	9
<b>2003</b>	<b>Net Exploratory Wells Drilled</b>	21	10	7	4	42
	Successful	7	2	2	2	13
	Unsuccessful	14	8	5	2	29
	<b>Net Development Wells Drilled</b>	12	0	264	26	302
	Successful	12	0	256	26	294
	Unsuccessful	0	0	8	0	8
<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

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**

	2004		2003		2002	
	Brazil	International	Brazil	International	Brazil	International
<b>Land rigs for onshore exploration and development</b>	19	28	15	10	16	4
Owned	13	0	13	0	12	0

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Leased	6	28	2	10	4	4
<b>Semi-submersible rigs</b>	18	0	17	0	20	0
Owned	4	0	4	0	4	0
Leased	14	0	13	0	16	0
<b>Drill ships</b>	7	1	8	1	5	0
Owned	0	0	0	0	4	0
Leased	7	1	8	1	1	0
<b>Jack-up rigs</b>	6	0	6	0	5	0
Owned	6	0	5	0	5	0
Leased	0	0	1	0	0	0
<b>Moduled rigs for offshore exploration and development</b>	11	0	9	0	4	0
Owned	8	0	6	0	4	0
Leased	3	0	3	0	0	0
<b>Total</b>	61	29	55	11	50	4

*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 five 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. As of December 31, 2004, we had a total of 7,958 oil and gas producing wells in Brazil, of which 7,307 were onshore and 651 were offshore.

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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 2004 was 482.6 Mbpd, or more than 53% 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 690 Mbpd operating in the Marlim field. We have a total of 83 production wells and 46 injection wells, and expect to drill one well in 2005. Peak production of 586.3 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). Average production of crude oil during 2004 was 92.2 Mbpd. The first module of the development of this field consisted of Platform P-36, which sank in March 2001, and which was producing 80 Mbpd prior to the accident. Since the loss of P-36, we have contracted a temporary Floating Production Storage and Offloading unit (FPSO Brazil) with a capacity of 90 Mbpd. First oil from this unit was attained on December 8, 2002. A total of eight wells, which were previously attached to P-36, have been attached to the new FPSO unit. A second platform (P-52) with a 180 Mbpd capacity is under construction. First oil from the unit is expected in 2007. A total of 20 production wells are planned in this module, including the nine, which were completed before the sinking of P-36. During 2004, we made a significant discovery of crude oil in the Roncador field.

The contracts for a third production unit, with production capacity of 190 Mbpd, were signed on June 17, 2004. The production unit consists of an FPSO (P-54), which is expected to begin production in 2007. A total of ten production wells and six injection 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 2004, the average production for Marlim Sul was 179.4 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. 13 wells are currently producing through P-40, out of a total of 16 planned production wells and ten injection wells. Production from the Marlim Sul FPSO unit began on June 7, 2004 and is currently producing 40.5 Mboe per day.

The contracts for a second module, with a production capacity of 180 Mbpd, were signed on June 17, 2004. The production system consists of a semi-submersible unit (P-51), which is expected to begin production in 2008. A total of 14 production wells and ten injection wells are planned.

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*Barracuda and Caratinga.* The Barracuda and Caratinga fields are located at water depths between 2,274 and 3,899 feet (700-1,200 meters). Oil production began in December 2004 through FPSO unit P-43, which was constructed in Singapore and moved to Brazil for completion and which was installed in the Barracuda field. Another FPSO unit, P-48, was converted in Brazil and started production in the Caratinga field in February 2005. Each FPSO unit has a capacity of 150 Mbd. 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 the end of 2005. An FPSO unit (P-50) with a capacity of 180 Mbd is currently being converted in Rio de Janeiro. A total of 16 wells and 14 injection wells are planned. We are the operator and Repsol-YPF is a partner with a 10% interest.

### Other Planned Developments

Other developments include: (1) the Jubarte field, already producing through a pilot system, that consists of an FPSO unit (Seillean) with a capacity of 20 Mbd that will, in phase I of the field development, be replaced by another FPSO (P-34) with 60 Mbd capacity in the end of 2005, (2) the Frade field, which we are developing in partnership with Chevron Texaco and (3) the Marlim Leste field, that will have an FPSO unit (P-53) with a 180 Mbd capacity, currently in the bidding phase. A contract to increase the production capacity of P-34 to 60 Mbd was signed on June 17, 2004. During 2004, we made discoveries of crude oil in the Jubarte and Marlim Leste fields.

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.

### *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 eight Brazilian states. We are also producing crude oil and natural gas in eight other countries: Angola, Argentina, Bolivia, Colombia, Ecuador, Peru, the United States and Venezuela. 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 2004, 2003 and 2002:

	<b>For the Year Ended December 31,</b>		
	<b>2004</b>	<b>2003(1)</b>	<b>2002</b>
<b>Crude Oil and NGL Production (in Mbpd)</b>			
Brazil (2)			
Offshore			
Campos Basin	1,204	1,252	1,217
Other	38	39	40
	<u>1,242</u>	<u>1,291</u>	<u>1,257</u>
Total offshore			
Onshore	251	248	243
	<u>1,493</u>	<u>1,540</u>	<u>1,500</u>
Total Brazil			
International	168	161	35
	<u>1,661</u>	<u>1,701</u>	<u>1,535</u>
<b>Total crude oil and NGL production</b>			
<b>Crude Oil and NGL Average Sales Price (U.S. dollars per Bbl)</b>			
Brazil	\$ 33.49	\$ 27.01	\$ 22.30
International	26.51	23.77	23.00
<b>Natural Gas Production (in Mmcfd)</b>			
Brazil(3)			
Offshore			
Campos Basin	645	657	690
Other	184	186	213
	<u>829</u>	<u>843</u>	<u>903</u>
Total offshore			
Onshore	762	657	609
	<u>1,590</u>	<u>1,500</u>	<u>1,512</u>
Total Brazil			
International	564	510	138
	<u>2,154</u>	<u>2,010</u>	<u>1,650</u>
<b>Total natural gas production</b>			
<b>Natural Gas Average Sales Price (U.S. dollars per Mcf)</b>			
Brazil(4)	\$ 1.93	\$ 1.79	\$ 1.22
International(5)	1.17	1.26	1.34
<b>Aggregate Average Lifting Costs (oil and natural gas) (U.S. dollars per boe)</b>			
Brazil			
With government take	\$ 10.77	\$ 8.62	7.04
Without government take	4.33	3.48	3.04
International(6)	2.60	2.46	2.08

(1) International production figures for 2003 include PEPSA and PELSA as of January 1, 2003, although our interests were only acquired in May 2003.

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- (2) Brazilian figures include production from shale oil reserves and natural gas liquids, which are not included in our proved reserves figures.
- (3) Brazilian figures include reinjected gas volumes, which are not included in our proved reserves figures.
- (4) Excludes (1) exploration and production overhead; (2) costs related to intra-company transfers of oil products to our exploration and production division; (3) costs of sales of oil products produced in natural plants overseen by our exploration and production department; and (4) price of oil and gas bought from partners in certain joint ventures.
- (5) Excludes (1) royalties; (2) special government participation; and (3) rental of areas.
- (6) Excludes Brazilian government take.

Average Brazilian production of crude oil and NGL for 2004 decreased 3.1% relative to 2003, reaching 1.5 million barrels per day, principally as a result of:

a delay to initiate production in platform P-43 in the Barracuda field;

a delay to initiate production in platform P-48 in the Caratinga field; and

a delay to initiate the operation of a production submarine in the East region of the Marimba field.

### *Reserves*

Our estimated worldwide proved reserves of crude oil and natural gas as of December 31, 2004 totaled approximately 11.82 billion barrels of oil equivalent, including:

9.94 billion barrels of crude oil and NGLs; and

11,247.1 billion cubic feet of natural gas.

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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 mainly 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 such factors may prove to be incorrect over time.

As of December 31, 2004, our domestic proved developed crude oil reserves represented 44.7% of our total domestic proved developed and undeveloped crude oil reserves. Our domestic proved developed natural gas reserves represented 55.7% of our total domestic proved developed and undeveloped natural gas reserves. Total domestic proved hydrocarbon reserves on a barrel of oil equivalent basis increased at a compounded annual growth rate of 2.5% from the end of 1997 to 10.6 billion barrels of oil equivalent at the end of 2004. Natural gas as a percentage of total domestic proved hydrocarbon reserves increased 1.1% over the same period, representing an increase in volume from 5,782 billion cubic feet in 1997 to 7,954 billion cubic feet at the end of 2004, increasing at a compounded annual growth rate of 5.4% from the end of 1997 to 2004.

DeGolyer and MacNaughton, or D&M, reviewed and certified 91% of our domestic proved crude oil, condensate and natural gas reserve estimates as of December 31, 2004. The estimates for the certification were performed in accordance with Rule 4-10 of Regulation S-X of the SEC.

The following table sets forth our estimated net proved developed and undeveloped reserves and net proved developed reserves of crude oil and natural gas by region as of December 31, 2004, 2003 and 2002:

**WORLDWIDE ESTIMATED NET PROVED RESERVES**

	Brazil			International			Combined Global Proved Reserves
	Crude Oil	Natural	Combined(2)	Crude Oil	Natural	Combined(2)	
		Gas(1)			Gas(1)		
(MMbbl)	(Bcf)	(Mmboe)	(MMbbl)	(Bcf)	(Mmboe)	(Mmboe)	
<b>Net Proved Developed and Undeveloped Reserves:</b>							
Reserves as of December 31, 2002	8,833.2	7,327.8	10,054.5	121.7	2,145.0	479.2	10,533.7
Revisions of previous estimates	(682.1)	459.3	(605.6)	(10.8)	(294.8)	(59.9)	(665.5)
Extensions, discoveries and improved recovery	1,439.8	778.3	1,569.6	55.5	80.1	68.9	1,638.5
Purchase of reserves in place	0.0	0.0	0.0	602.8	1,346.9	827.3	827.3
Sales of reserves in place	0.0	0.0	0.0	(7.7)	(49.5)	(16.0)	(16.0)
Production for the year	(539.5)	(454.0)	(615.2)	(40.8)	(136.8)	(63.6)	(678.8)
Reserves as of December 31, 2003	9,051.4	8,111.4	10,403.3	720.7	3,090.9	1,235.9	11,639.2
Revisions of previous estimates	(414.9)	(262.1)	(458.6)	(18.8)	276.4	27.3	(431.3)
Extensions, discoveries and improved recovery	1,129.3	582.6	1,226.4	60.6	116.5	80.0	1,306.4
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	0.6	18.5	3.7	3.7
Production for the year	(522.4)	(477.6)	(602.0)	(61.1)	(209.5)	(96.0)	(698.0)
Reserves as of December 31, 2004	9,243.4	7,954.3	10,569.1	702.0	3,292.8	1,250.9	11,820.0
<b>Net Proved Developed Reserves:</b>							
As of December 31, 2002	3,912.9	3,892.5	4,561.7	94.7	2,043.9	435.4	4,997.1
As of December 31, 2003	3,629.5	4,398.1	4,362.5	404.1	2,548.4	828.8	5,191.3

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As of December 31, 2004	4,129.8	4,427.6	4,867.7	383.1	2,495.2	799.0	5,666.7
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- (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.

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- (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.

The following tables set forth our crude oil and natural gas proved reserves by region, as of December 31, 2004, 2003 and 2002:

**CRUDE OIL NET PROVED RESERVES BY REGION**

	As of December 31,					
	2004		2003		2002	
	Proved		Proved		Proved	
	Developed and Undeveloped	Proved Developed	Developed and Undeveloped	Proved Developed	Developed and Undeveloped	Proved Developed
	(MMbbl)					
<b>Brazil</b>						
Offshore						
Campos Basin	8,130.4	3,422.7	8,089.1	2,899.6	7,829.8	2,742.5
Other	335.4	106.1	159.8	111.7	162.7	498.5
<b>Total offshore</b>	<b>8,465.8</b>	<b>3,528.8</b>	<b>8,248.9</b>	<b>3,011.3</b>	<b>7,992.5</b>	<b>3,241.0</b>
Onshore	777.6	601.0	802.5	618.2	840.7	671.9
<b>Total Brazil</b>	<b>9,243.4</b>	<b>4,129.8</b>	<b>9,051.4</b>	<b>3,629.5</b>	<b>8,833.2</b>	<b>3,912.9</b>
<b>International</b>						
Other South America(1)	678.4	367.0	703.9	387.6	99.5	72.8
West Coast of Africa	11.8	11.8	14.0	14.0	19.1	19.1
Gulf of Mexico	11.8	4.3	2.8	2.4	3.2	2.8
<b>Total international</b>	<b>702.0</b>	<b>383.1</b>	<b>720.7</b>	<b>404.1</b>	<b>121.7</b>	<b>94.7</b>
<b>Total</b>	<b>9,945.4</b>	<b>4,512.9</b>	<b>9,772.1</b>	<b>4,033.6</b>	<b>8,955.0</b>	<b>4,007.6</b>

(1) Includes Argentina, Bolivia Colombia, Ecuador, Peru and Venezuela.

**NATURAL GAS NET PROVED RESERVES BY REGION**

	As of December 31,		
	2004	2003	2002

	Proved		Proved		Proved	
	Developed		Developed		Developed	
	and	Proved	and	Proved	and	Proved
	Undeveloped	Developed	Undeveloped	Developed	Undeveloped	Developed
	(Bcf)					
<b>Brazil</b>						
Offshore						
Campos Basin	4,039.3	1,820.4	4,096.2	1,598.0	4,147.2	1,529.4
Other	1,337.5	854.0	1,291.2	959.5	1,372.8	880.5
<b>Total offshore</b>	<b>5,376.8</b>	<b>2,674.4</b>	<b>5,387.4</b>	<b>2,557.5</b>	<b>5,520.0</b>	<b>2,409.9</b>
Onshore	2,577.5	1,753.2	2,724.0	1,840.6	1,807.8	1,482.6
<b>Total Brazil</b>	<b>7,954.3</b>	<b>4,427.6</b>	<b>8,111.4</b>	<b>4,398.1</b>	<b>7,327.8</b>	<b>3,892.5</b>
<b>International</b>						
Other South America(1)	3,162.2	2,456.2	3,058.2	2,526.8	2,092.0	2,001.9
West Coast of Africa	0.0	0.0	0.0	0.0	0.0	0.0
Gulf of Mexico	130.6	39.0	32.7	21.6	53.0	42.0
<b>Total international</b>	<b>3,292.8</b>	<b>2,495.2</b>	<b>3,090.9</b>	<b>2,548.4</b>	<b>2,145.0</b>	<b>2,043.9</b>
<b>Total</b>	<b>11,247.1</b>	<b>6,922.8</b>	<b>11,202.3</b>	<b>6,946.5</b>	<b>9,472.8</b>	<b>5,936.4</b>

(1) Includes Argentina, Bolivia, Colombia, Peru and Venezuela.

Please see Supplementary Information on Oil and Gas Producing Activities in our audited consolidated financial statements for further details on our proved reserves.

## Refining, Transportation and Marketing

### Summary and Strategy

Our refining, transportation and marketing business segment encompasses the refining, transportation and marketing of crude oil, oil products and fuel alcohol, including investments in petrochemicals.

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We own and operate 11 refineries in Brazil, with a total processing capacity of 1.99 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 Mbd 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 oil 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 (which we also process in our refineries) and oil products. As our own domestic production increases and refinery upgrades enable us to process more throughput in the next few years, we expect to import proportionately less crude oil and oil products. Until January of 2002, we were 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 single supplier for almost fifty years of a country that ranks as the 12th largest oil consuming nation in the world, according to the June 2004 issue of *Statistical Review of 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.

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;

- continue to grow and modernize our transportation infrastructure, including the renewal of our shipping fleet;

- diversify the business portfolio, which will focus on petrochemicals, logistics and commercial operations of new energy products, and take benefit of the synergies with downstream assets and capabilities; and

- improve efficiency throughout the logistical chain to the client, emphasizing operational excellence (competitive costs, quality and reliability of delivery) and risk management.

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

*Refining*

On December 31, 2004, we had a total refining installed capacity of approximately 2.1 million barrels per day, which, according to *Petroleum Intelligence Weekly*, made us the 8th largest refiner of oil products in the world among publicly traded companies in 2004. Worldwide, we processed an average of 1.8 million barrels of oil per day in 2004, which represents a utilization rate of 85% for the year, calculated on total capacity. This compares with an 81% average utilization rate in 2003 and an 83% average utilization rate in 2002.



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Our domestic production in 2004 supplied approximately 76% of the crude oil feedstock for our refinery operations in Brazil, as compared to 80% in 2003 and 79% in 2002. 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 2004, we processed, in Brazil, 623 million barrels of crude oil or 1.7 million barrels per day. Our average refining costs (consisting of variable costs and excluding depreciation and amortization) in Brazil were U.S. \$1.36 per barrel in 2004, U.S.\$1.17 per barrel in 2003 and U.S.\$0.91 per barrel in 2002. Our production in Brazil supplied approximately 76% of this crude oil. 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.

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The following table describes the installed capacity, refining throughput and utilization of our refineries for each of 2004, 2003 and 2002:

**REFINING STATISTICS**

Refineries	2004			2003			2002		
	Capacity	Throughput <sup>(1)</sup>	Utilization <sup>(2)</sup>	Capacity	Throughput <sup>(1)</sup>	Utilization <sup>(2)</sup>	Capacity	Throughput <sup>(1)</sup>	Utilization <sup>(2)</sup>
	(Mbpd)	(Mbpd)	(%)	(Mbpd)	(Mbpd)	(%)	(Mbpd)	(Mbpd)	(%)
Paulínia	365	351	96%	365	297	81%	352	329	93%
Landulpho									
Alves	323	237	73	323	200	62	306	213	70
Duque de									
Caxias	242	230	95	242	214	88	242	204	84
Henrique Lage	251	236	94	251	219	87	226	198	88
Alberto									
Pasqualini(3)	189	103	54	189	105	56	189	106	56
Pres. Getúlio									
Vargas(4)	189	165	87	189	191	101	189	192	101
Pres. Bernardes	170	154	91	170	164	96	170	154	90
Gabriel Passos	151	132	87	151	129	85	151	128	85
Manaus	46	45	98	46	44	96	46	45	98
Capuava	53	46	87	53	44	83	53	44	83
Fortaleza	6	5	83	6	5	83	6	6	100
Total Brazilian	1,985	1,703	86	1,985	1,612	81	1,930	1,619	84
Gualberto									
Villarreal(5)	40	22	55	40	18	45	40	18	45
Ricardo									
Elicabe(6)	31	30	98	31	30	97	31	29	94
Guillermo Elder									
Bell(5)	20	16	80	20	15	75	20	14	70
San Lorenzo (7)	38	33	89	38	33	87			
Del Norte (8)									
Total									
International	129	101	78	129	96	74	91	61	67
Total	2,114	1,804	85%	2,114	1,708	81%	2,021	1,680	83%

(1) Throughput does not include residue reprocessed.

(2) Utilization was calculated based on crude oil and NGL only.

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

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- (4) Because of improvements to this refinery its output can now slightly exceed the nameplate capacity originally registered with and acknowledged by the National Petroleum Agency in Brazil.
- (5) Located in Bolivia.
- (6) Located in Argentina.
- (7) Located in Argentina. We acquired this refinery through our acquisition of Petrobras Energia, formerly Perez Companac.
- (8) Located in Argentina. Del Norte statistics are not included since we own just 28.5% of that refinery.

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. Because we operate our refineries to maximize the output of diesel fuel for which demand in Brazil is greater than our internal production, we produce volumes of gasoline and fuel oil in excess of Brazilian demand and such excess 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 2004, 2003 and 2002:

### DOMESTIC PRODUCTION VOLUME OF OIL PRODUCTS

Product	2004	%	2003	%	2002	%
	(Mbpd)		(Mbpd)		(Mbpd)	
Diesel	657.0	38.7%	623.4	38.0%	596.7	36.4%
Gasoline	292.8	17.3	290.9	17.8	311.1	19.0
Fuel oil	279.9	16.5	266.4	16.2	278.3	17.0
Naphtha and jet fuel	220.2	13.0	219.6	13.4	213.3	12.9
Other	245.7	14.5	238.6	14.6	241.4	14.7
<b>Total</b>	<b>1695.6</b>	<b>100.0%</b>	<b>1,638.9</b>	<b>100.0%</b>	<b>1,640.8</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 and reduce the need to import such products. 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

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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 to comply with stricter environmental regulations currently being implemented; and

reduce emissions and pollutant streams.

**Major Refinery Projects**

Included in our Strategic Plan are a number of upgrades to our key refineries. Our major investments are generally (1) coking units to further break down our heavy oil into middle distillates or (2) hydro treatment units that reduce sulfur to produce products that meet international standards. We believe our 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. The principal refineries and planned investments are as follows:

<b><u>Refinery</u></b>	<b><u>Objective</u></b>
Alberto Pasqualini (REFAP)	Expansion and modernization of refinery, including the installation of a coking unit, residue fluid cat. craking unit, and upgrade gasoline and diesel quality.
Presidente Getúlio Vargas Refinery (REPAR)	Conversion, modernization and expansion of existing refinery and units to upgrade the quality of diesel and gasoline.
Henrique Lage (REVAP)	Installation of coking unit and units to upgrade the quality of diesel and gasoline.
Paulínia Refinery (REPLAN)	Upgrade the quality of diesel and gasoline.
Landulpho Alves (RLAM)	Conversion, modernization and expansion of existing refinery and units to upgrade the quality of diesel and gasoline.
Duque de Caxias Refinery (REDUC)	Expansion of existing refinery, installation of a coking unit and units to upgrade the quality of diesel and gasoline.
Gabriel Passos Refinery (REGAP)	Expansion of the coking unit and upgrade the quality of diesel and gasoline.
Presidente Bernardes Refinery (RPBC)	Upgrade the quality of gasoline.

Capuava Refinery (RECAP)

Upgrade the quality of diesel and gasoline.

*Imports*

During 2004 we continued to import crude oil and 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

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to import lighter crude oils to create an adequate mix of oils to satisfy Brazilian demand and to permit refining by our refineries.

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 sold to the retail market in Brazil through distributors, including our subsidiary BR.

The average daily volume of our imports of crude oil has increased to 450,000 barrels per day in 2004, as compared to 319,000 barrels per day in 2003 because Brazilian demand for oil products increased in 2004 and, although we refined more domestic crude oil in 2004 as compared to 2003, it was not sufficient to meet the increased Brazilian demand. We opted to import more crude oil instead of oil products to meet the increased demand for oil products in Brazil in 2004. The average daily volume of imports of crude oil decreased from 326,000 barrels per day in 2002 to 319,000 in 2003. The following table sets forth the percentage of crude oil that we imported during each of 2004, 2003 and 2002 by region.

**IMPORTS OF CRUDE OIL BY REGION**

	<u>2004</u>	<u>2003</u>	<u>2002</u>
			Volume (%)
<b>Region</b>			
Africa	73.4%	63.7%	57.3%
Middle East	24.2	30.9	29.7
Central and South America/Caribbean	2.4	3.1	10.4
Oceania	0.0	0.9	0.0
Europe	0.0	1.4	2.6
<b>Total</b>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

In 2004, our total costs of imports of crude oil from all these regions was U.S.\$5,191 million, as compared to U.S.\$3,541 million in 2003 and U.S.\$3,162 million in 2002.

We purchased approximately 17.7% of our 2004 crude oil imports and 23.4% of our 2003 crude oil imports pursuant to one-year term contracts, which are considered to be long-term contracts within the industry standard practice. During 2004 we had one long-term contract providing for the supply of crude oil to us in Brazil with suppliers from Saudi Arabia. This contract was renewed under the same terms and will expire on January 31, 2006. 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 109,981 barrels per day in 2004, as compared to 121,827 barrels per day in 2003 and 215,121 barrels per day in 2002, primarily as a result of the increase in the domestic refinery production. The following table sets forth the volume of oil products that we imported during each of 2004, 2003 and 2002:

**IMPORTS OF OIL PRODUCTS**

	2004	2003	2002
	Volume (Mbbbl)		
<b>Oil Product</b>			
LPG	11,537.2	12,033.7	20,554.4
Distillates(1)	16,878.7	23,182.6	43,998.8
Naphtha	7,230.5	5,025.9	5,855.9
Others(2)	4,486.7	4,224.6	8,110.2
<b>Total</b>	<b>40,133.2</b>	<b>44,466.7</b>	<b>78,519.3</b>

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

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

In 2004, our total costs of oil product imports, measured on a cost-insurance-and-freight basis, was U.S.\$1,721 million, as compared to U.S.\$1,542 million in 2003 and U.S.\$2,086 million in 2002. 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.

**Table of Contents***Exports*

We also export that portion of oil products processed by our refineries that exceed Brazilian demand. In addition, we export domestic crude oil that we are unable to process in our refineries because of limited conversion capacity. Our total exports decreased to 186,221 Mbbl in 2004 from 192,545 Mbbl in 2003 as a result of the increase in Brazilian demand for oil products. The following table sets forth the volumes of oil products we exported during each of 2004, 2003 and 2002:

**EXPORTS OF OIL AND OIL PRODUCTS(1)**

	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<u>          </u>	<u>          </u>	<u>          </u>
	<b>(Mbbl)</b>		
Crude oil	66,319	84,899	85,123
Fuel oil (including bunker fuel)	107,104	85,740	89,350
Gasoline	11,510	13,656	17,337
Other	1,288	8,250	10,192
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total</b>	<b>186,221</b>	<b>192,545</b>	<b>202,003</b>
	<u>          </u>	<u>          </u>	<u>          </u>

(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.\$5,923 million in 2004, U.S.\$5,335 million in 2003 and U.S.\$4,760 million in 2002.

*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, so we created a wholly-owned subsidiary, Transpetro, in 1998 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 retain 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.

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. At December 31, 2004, our onshore and offshore crude oil and oil products pipelines aggregated 6,449 miles or 10,377 kilometers in length, our natural gas pipelines aggregated approximately 6,192 miles or 9,963 kilometers in length - including the Brazilian side (1,612 miles or 2,593 kilometers) of the Bolivia-Brazil pipeline, and our flexible pipelines aggregated 1,523 miles or 2,451 kilometers in length.

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NATURAL GAS PIPELINES IN BRAZIL

CRUDE OIL AND OIL PRODUCTS PIPELINES IN BRAZIL

In March 2005, we signed all of the financing documents for the PDET project originally designed to enhance 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.

At the end of 2003, the government of Rio de Janeiro enacted a law creating severe obstacles to the economic feasibility of the original concept of the onshore portion of PDET. After three months of ultimately unsuccessful negotiations with the Rio de Janeiro State government, we announced the cancellation of the onshore portion of the PDET project and a revision to the project's original design.

Under the revised project, the original offshore fixed platform (PRA-1) will be connected to five offshore production platforms through pipelines and will transfer the crude oil to a floating, storage and offloading platform (FSO) and two monobuoys, which will in turn facilitate the transfer of the crude oil to shuttle tankers or the export of the crude oil to other countries. The shuttle tankers will transport the oil to the Southeast terminals where it will be pumped to existing onshore pipelines connected to refineries in Rio de Janeiro, Minas Gerais and São Paulo. The PDET project will cost approximately U.S.\$760 million and is expected to start its commercial operation in the first quarter of 2007. This project will permit the increase the flow of oil produced in the Campos Basin by up to 630,000 barrels per day.

Transpetro also operates 43 storage terminals with aggregate capacity of 63.3 million barrels of oil equivalent. At December 31, 2004, tankage capacity at these terminals consisted of 34.1 million barrels of crude oil, 26.7 million barrels of oil products and fuel alcohol and 2.5 million barrels of LPG.

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Transpetro is currently evaluating alternatives to improve the efficiency of its transportation system, including evaluating improvements to the monitoring and control of the crude oil and natural gas and oil products 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. Transpetro implemented the first phase of the project and inaugurated a centralized control and operating center in June 2002, in its headquarters in Rio de Janeiro. Currently, there are 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. Transpetro's goal is to be able to operate all of its domestic pipelines remotely, initially via the regional stations, and ultimately via the centralized control and operating center located in its headquarters in Rio de Janeiro. In 2004, the centralized control and operating center began to operate a new oil pipeline (OCAB) from Barra do Furado to Cabiúnas, and a new gas pipeline (GASEB) from Sergipe to Bahia. We will continue to develop this project. In addition, Transpetro has been investing in the development of a pipeline integrity program (*Programa de Integridade de Dutos*) to ensure the integrity and safety of its pipelines operations.

## Shipping

At December 31, 2004, our fleet consisted of the following 52 vessels (46 owned and 6 bareboat chartered), 32 of which are single hulled and 20 of which are double hulled, with aggregate deadweight tonnage of 2.51 million:

**OWNED/BAREBOAT CHARTERED VESSELS**

<b>Type of Vessel</b>	<b>Number</b>	<b>Capacity</b> (deadweight tonnage in thousands)
Tankers	44	2,443.4
Liquefied petroleum gas tankers	6	40.2
AHTS Anchor Handling Tug Supply	1	2.2
FSO Floating, Storage and Offloading	1	28.9
<b>Total</b>	<b>52</b>	<b>2,514.7</b>

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. The single-hulled ships only operate in areas where environmental legislation permits, including Brazil, Venezuela, Argentina and the West Coast of Africa. The double-hulled ships operate in other international locations in accordance with applicable laws. Our shipping operations support the transportation of crude oil from offshore production systems, our import and export of crude oil and oil products and our coastal trade. Our Strategic Plan calls for an investment of U.S.\$1.2 billion from 2004 to 2010 to renew our fleet, by adding 53 additional vessels by 2015. The table below sets forth the types of products and quantities of such products we transported during each of the years indicated.

**PRODUCTS AND QUANTITIES TRANSPORTED**

2004	2003	2002
------	------	------

	—	—	—
	(millions of tons)		
<b>Product</b>			
Crude oil	88.4	96.6	93.2
Oil Products	34.0	28.1	30.1
Fuel Alcohol			
<b>Total</b>	<b>122.4</b>	<b>124.7</b>	<b>123.3</b>
Percentage transported by our owned/bareboat chartered fleet	45.1%	45.3%	45.1%
Coastal transport as a percentage of total tonnage	61.1%	64.2%	65.6%

The average monthly-chartered tonnage in 2004 amounted to 4.6 million deadweight tons, as compared to 4.0 million deadweight tons in 2003 and 3.9 million deadweight tons in 2002. 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.\$701 million in 2004, U.S.\$537 million in 2003 and U.S.\$431 million in 2002.

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### *Petrochemicals*

We conduct our petrochemical activities through our subsidiary, Petrobras Química S.A., or Petroquisa, with the exception of naphtha sales. Petroquisa is a holding company that holds interests in eight operational petrochemical companies involved in the production and sale of basic petrochemical products, derivative petrochemical products and utilities. At December 31, 2004, our ownership percentage of the total capital of these investees ranged from 8.45% to 85.04% and our ownership percentage of the voting capital of these investees ranged from 10.02% to 70.45%. The total book value of these investments was U.S.\$918 million on December 31, 2004. Most of such interests are minority voting interests. In 2004, Petroquisa increased its participation in one of its investees, Petroquímica Triunfo, from 45.22% to 70.45% of its voting capital and from 59.92% to 85.04% of its total capital, through an acquisition from Dow Chemical for U.S.\$ 32.5 million.

The basic supply feedstock used in Brazil's petrochemical industry is naphtha, an oil based product. Until 2001, we were the sole supplier of naphtha to Brazil's petrochemical industry. Following deregulation of the product in 2002, the petrochemical industry began importing naphtha directly. In 2004, the industry imported approximately 33% of its naphtha needs, and we supply the remainder from our refining operations.

Our petrochemicals business, based on the equity in results of affiliate companies, accounted for U.S.\$13 million in 2004. We currently expect to maintain a presence in the petrochemicals industry principally by participating in projects integrated with our refineries. We expect that our selective investments in petrochemicals will solidify our involvement in the entire value chain, integrating refining and basic and derivative products. Although we have divested certain interests in the petrochemical segment in the past, we plan to increase the current level of our investments, as part of our downstream strategy.

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). In addition to Petroquisa, the three other investors are BNDESPAR 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.\$1.08 billion budgeted construction cost, 60% is being provided by long-term loans from, or guaranteed by, U.S. Ex-Im Bank, BNDES (the Brazilian Federal Development Bank) and SACE (the Italian Export Credit Agency), and 40% is funded by equity investments, of which our portion is approximately U.S.\$72 million. At December 31, 2004, we had spent approximately U.S.\$66 million of this total. We expect Rio Polímeros to be operational by mid-2005 with nominal capacity plant of 540,000 tons per year of polyethylene and 79,000 tons per year of propylene. The polyethylene and propylene will be produced from ethane and propane extracted from natural gas originated in the Campos Basin.

According to our 2004-2010 Strategic Plan, we intend to spend approximately U.S.\$1.1 billion in capital expenditures in our petrochemicals operation from 2004 to 2010. Such investment will be aimed at increasing production of our basic petrochemicals, including polyolefins (polyethylene and polypropylene), acrylic acid and terephthalic acid. These projects will be carried out in conjunction with other partners. Additionally, the preliminary technical and economic feasibility studies carried out by Petrobras identified the construction of a basic petrochemical complex as an important opportunity. This complex would integrate refinery units and petrochemical facilities to produce petrochemical raw materials like ethylene, propylene, aromatics and its petrochemical derivatives, like polyethylene and polypropylene, in order to supply the growing demand for such products in the Brazilian market. This opportunity is now under study.

In April 2005, we sold our interest in Companhia Alagoas Industrial - CINAL for US\$2.9 million, as its output was not related to our core business.

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On April 29, 2005, Odebrecht, Norquisa and ODBPAR (the Odebrecht Group) and Petroquisa entered into a second amendment of the memorandum of understanding, which granted an option to Petroquisa to acquire an amount of Braskem voting shares sufficient to increase its existing participation in Braskem to up to 30% of Braskem voting share capital (which we refer to as Option Shares ). Petroquisa must do so by December 31, 2005, through the contribution of its ownership interest in companies located in the Triunfo Petrochemical Complex and in other companies considered strategic by Braskem (which we refer to as Assets ). If the value of the Assets is

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insufficient for Petroquisa to obtain the desired level of ownership, Odebrecht Group will sell the remaining Option Shares. On the other hand, if the value of the Assets would permit Petroquisa to increase its participation in Braskem to more than 30% of Braskem voting shares, Petroquisa will be limited to 30% and will use the additional Assets to acquire class A preferred shares. Petroquisa must inform the other parties to the agreement what assets it intends to contribute by September 29, 2005. Odebrecht Group has the right to terminate the option if it determines that Petroquisa has not included in the Assets its ownership interests in companies that Odebrecht Group considers essential in the Triunfo Petrochemical Complex.

The valuation process of the Assets in order to allow for the possible exercise of the option will begin by October 14, 2005. The Option Shares will be valued using the discounted cash flow method, without giving effect to any control premium. The Second Amendment eliminates the restriction on Petroquisa from owning interests in other petrochemical companies or projects following its exercise of the option. Simultaneously with the exercise of the option, the parties have agreed to enter into a shareholders' agreement in respect of their ownership interests in Braskem.

## **Distribution**

### *Summary and Strategy*

Through BR, we distribute oil products, fuel alcohol and natural gas to retail, commercial and industrial customers throughout Brazil. Our retail customers in Brazil include Shell Brasileira de Petróleo S.A., Esso Brasileira de Petróleo S.A., Companhia de Petróleo Ipiranga S.A. and Texaco do Brasil S.A. Our operations are supported by tankage capacity of approximately 8.0 million boe, at 115 storage facilities and 102 aviation product depots at airports throughout Brazil.

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, environmental and social responsibility guidelines; and

position BR as the top brand in the eyes of customers by providing a recognizable national network of quality service providers.

On August 9, 2004, BR acquired Agip do Brasil S.A. from its parent company ENI B.V. for approximately U.S.\$511 million. Agip do Brasil S.A. is a liquefied petroleum gas (LPG), fuel and lubricant distributor operating in Brazil under the Liquigás, Novogás and Tropicgas brands for LPG distribution and the Agip, Companhia São Paulo de Petróleo and Ipê brands for fuel distribution. This acquisition should enable us to increase BR's share of the LPG distribution market as well as consolidate its presence in the automotive fuel distribution market in certain regions of the country. On January 1, 2005, we changed the name of Agip do Brasil to Liquigás Distribuidora S.A. Liquigás will be responsible for our LPG segment, which will also include LPG's commercialization in bulk. Agip's fuel and lubricant distribution business will be operated by BR.





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In 2004, we sold 175.1 million barrels of oil products to wholesale customers, with gasoline and diesel fuel representing approximately 85.4% of these sales. Of our total sales in 2004, 145.1 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 2004, 2003 and 2002:

**OIL PRODUCT SALES**

	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>(MMbbl)</b>		
<b>Product</b>			
Diesel	224.9	208.3	218.0
Gasoline	104.8	101.8	110.2
Fuel oil	106.1	98.5	77.5
Naphtha and jet fuel	81.5	76.6	80.9
Other	129.1	283.2	311.6
<b>Total</b>	<b>646.4</b>	<b>768.4</b>	<b>798.2</b>
<b>Customer</b>			
<b>Wholesalers</b>			
Diesel	106.6	100.2	110.6
Gasoline	42.9	41.0	46.6
Other	25.6	26.0	32.4
<b>Total wholesalers</b>	<b>175.1</b>	<b>167.2</b>	<b>189.6</b>
<b>Retail distributors</b>			
BR	145.1	133.6	158.0
Third parties	326.2	467.6	450.6
<b>Total retail distributors</b>	<b>471.3</b>	<b>601.2</b>	<b>608.6</b>
<b>Total customers</b>	<b>646.4</b>	<b>768.4</b>	<b>798.2</b>

Retail

As of December 31, 2004, our sales network in Brazil included 6,785 active and non-active retail service stations compared to 7,000 as of December 31, 2003, and comprised approximately 24% of the total number of service stations in Brazil, all under the brand name BR. Over 63% of these BR stations are located in the South and Southeast regions of Brazil, where over 59% of Brazil's total population of 170 million reside. Of these 6,785 service stations, 5,047 were active stations and BR owned 631. As required under Brazilian law, BR subcontracts the operation of all its service stations to third parties. The other 6,154 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.

In 2004, 245 of our service stations also sold vehicular natural gas, compared to 204 in 2003 and 170 in 2002. The sales from these stations consisted of 15,005 million cubic feet (425 million cubic meters) in 2004, representing 27% of Brazilian market share, 14,554 million cubic feet

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(412 million cubic meters) in 2003, representing 31.2% of Brazilian market share and 13,245 million cubic feet (375 million cubic meters) in 2002, representing 60.6% of Brazilian market share.

The table below sets forth market share (based on volume) for retail sales of different products in Brazil for each of 2004, 2003 and 2002:

### DISTRIBUTION MARKET SHARE

	2004	2003	2002
Fuel oil	64.4%	65.2%	67.4%
Diesel	29.6	26.7	27.1
Gasoline	23.3	21.9	23.8
Fuel alcohol	31.2	33.3	30.5
<b>Total</b>	<b>32.8%</b>	<b>31.5%</b>	<b>32.9%</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.

During 2004, approximately 24.6% 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

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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 3,896 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. We plan to take the following actions through 2010:

selectively expand our service stations network, reinforcing the Petrobras image;

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.

We participate in the retail sector in Argentina, where we currently own 727 retail service stations that operate under the brand names Petrobras (330 stations), Eg3 (337 stations) and San Lorenzo (60 stations). We also have a participation in the retail sector in Bolivia with 103 retail service stations.

**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 32.8%, which has remained relatively constant over the past several years.

Set forth below are commercial and industrial sales statistics for each of 2004, 2003 and 2002:

**COMMERCIAL AND INDUSTRIAL SALES BY PRODUCT**

**For the Year Ended December 31,**

<b>2004</b>	<b>2003</b>	<b>2002</b>
-------------	-------------	-------------

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	(Mboe)		
Fuel oil	24,716	26,368	32,642
Diesel	75,799	65,183	67,374
Gasoline	32,146	28,710	30,688
Jet fuels	15,949	14,343	14,397
Fuel alcohol	4,147	3,286	3,522
Lubricants	1,459	1,256	1,397
Others	17,259	19,492	20,586
<b>Total</b>	<b>171,475</b>	<b>158,638</b>	<b>170,606</b>

**Natural Gas and Power**

*Summary and Strategy*

Our natural gas and power segment encompasses the purchase, sale and transportation of natural gas produced in or imported into Brazil. Additionally, this segment includes our domestic electric energy commercialization activities as well as investments in domestic natural gas transportation companies, state-owned natural gas distributors and thermal electric companies.

The natural gas market in Brazil has been growing steadily. In 2004, we estimate that natural gas consumption represented approximately 7.5% of Brazil's primary energy consumption, as compared to 6.5-7.0% in 2003 and 5.5-6.0% in 2002. The Brazilian government has estimated that natural gas will represent 12% of primary energy

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consumption by 2010. We expect that a portion of this growth will come from increased industrial demand as well as from the Brazilian government's environmental policies encouraging the replacement of traditional industrial fuels with cleaner energy sources. The development of natural gas-fired thermoelectric plants in Brazil will also aid growth in the natural gas market. During the last three years, we estimate that industrial consumption of natural gas has grown by 75% while vehicular consumption has grown by approximately 70%.

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;

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

dedicate 0.5% of our total capital spending to renewable energy, including wind power, biomass and photo voltaic power generation.

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

### *Natural Gas*

#### Pipelines

Our main pipeline investment has been 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. 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. This pipeline is currently in operation and it supplies gas to some of our power and petrochemical plants, including the Uruguiana Power Plant and the Triunfo Petrochemical Plant.

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Our investment in the Bolivia-Brazil gas pipeline was the result of a 1996 gas supply agreement, or the GSA, for the purchase of natural gas between the Bolivian state oil company, Yacimientos Petrolíferos Fiscales Bolivianos (YPFB), and us. The GSA requires us to purchase from YPFB minimum specified quantities of natural gas transported through the pipeline over a 20-year term.

We are also investing in other major domestic natural gas projects: Cabiúnas, the Southeast and the Northeast Gas Pipeline networks, Urucu Manaus Gas Pipeline and the Southeast Northeast Gas Pipeline (GASENE).

The Cabiúnas project comprises transportation and processing facilities of 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 operational by the second

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semester of 2005 and to increase transportation capacity from the current 290 million cubic feet (8.2 million cubic meters) per day to a total of 476 million cubic feet (13.5 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 2004, the average daily volume of natural gas flared on the offshore platforms of the Campos Basin was 88 million cubic feet (2.5 million cubic meters).

We are currently developing the Southeast and the Northeast Gas Pipeline Networks (*Malha Sudeste and Malha Nordeste*) jointly with private capital investors (the Malhas Project). These projects will create additional transportation capacity by expanding the existing natural gas infrastructure and delivering natural gas to markets in the Northeast and Southeast regions of Brazil. These projects include the construction of an approximately 890-mile (1,423 kilometers) pipeline network, which is expected to start operations in 2007, at a total cost of approximately U.S.\$1,000 million. We are currently negotiating with private capital investors an additional investment of U.S.\$900 million for this gas pipeline network.

We are negotiating a long-term financing for a project to deliver natural gas to the states of Amazonas in Northern Brazil (Urucu - Manaus Gas Pipeline). Another long term financing is being negotiated for the Southeast-Northeast Gas Pipeline (GASENE). This pipeline, with a length of 1,280 kilometers, will connect the Southeast and Northeast gas pipeline networks allowing the interconnection of the Brazilian natural gas network system (*Rede Básica de Transporte de Gás Natural*). This pipeline will link more gas supply sources to demand and increase the existing gas pipeline network's overall reliability.

### 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 19 natural gas distribution companies from a total of 26 existing companies. Of the 19 companies in which we have minority interests, 14 are currently in operation. These companies have an aggregate pipeline extension of 1,800 miles (2,900 kilometers). In 2004, these gas distribution companies sold an average of 585.7 million cubic feet of natural gas per day (16.4 million cubic meters) and generated total net operating revenues of R\$2.6 billion (U.S.\$0.9 billion), as compared to R\$2.4 billion (U.S.\$0.8 billion) in 2003. 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 the State of Espírito Santo, we have the exclusive rights to distribute natural gas through BR.

In December 2004, Gaspetro acquired a 40% equity interest in Gasmig, the gas distribution company of the State of Minas Gerais, from Cemig for R\$154 million (U.S.\$58 million). In connection with this acquisition, we assumed the obligation to construct natural gas pipelines to be financed by Cemig. In 2004, Gaspetro also increased its participation in CEG-Rio, the gas distribution company of the State of Rio de Janeiro, by acquiring an additional 9.86% of common shares and 13.68% of preferred shares from Gás Natural SGD for R\$46.8 million (U.S.\$16.5 million). Gaspetro now holds 26.2% and 43.4% of CEG-Rio's common and preferred shares, respectively.

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 gas purchase obligations (in the case of contracts relating to Brazilian gas), and ship-or-pay and gas purchase obligations (in the case of contracts relating to Bolivian gas or with thermoelectric power producers). These ship-or-pay and gas purchase contracts do not permit net settlement by either the buyer or the seller, and no market mechanism exists for net settlement.





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The following table sets forth our domestic sales of natural gas to affiliated and non-affiliated local distribution companies for each of 2004, 2003 and 2002:

**DOMESTIC SALES OF NATURAL GAS TO LOCAL DISTRIBUTION COMPANIES**

	<u>Year Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(in MMscfd)		
Total sales annual average	1164	978	862
Annual sales growth	19%	13.4%	20.3%

**Commitments and Sales Contracts**

*Gas purchase 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 that varies with the price of fuel oil. We have purchased and paid in 2004, 2003 and 2002, approximately U.S.\$638 million, U.S.\$452 million and U.S.\$260 million, respectively. During 2003 and 2002 we purchased less than the minimum volumes set under our agreement with YPFB, and therefore we were obligated to make payments of U.S.\$29 million and US\$52 million, respectively. Set forth below are the minimum volumes we have agreed to under these contracts, together with an estimate of the amounts we are obligated to pay for such minimum volumes:

**NATURAL GAS PURCHASE COMMITMENTS**

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Volume Obligation (Mmcmpd)	24	24	24	24	24
Volume Obligation (Mmcf)	850	850	850	850	850
Estimated Payments (U.S.\$ million)(1)	716	716	716	716	716

(1) Amounts calculated based on current prices set forth under the agreements projected constant to the future. Prices may be adjusted in the future and actual amounts may vary.

In connection with the above gas purchase contract, we entered into a contract, effective October 2002, with a gas producer to reduce the volatility of prices under the gas purchase contract through 2019 the Natural Gas Price Volatility Reduction Contract, or PVRC. The volume covered by the PVRC represents approximately 43% of the anticipated volume under the gas purchase contract. See Qualitative and Quantitative Disclosure about Market Risk Petrobras Commodity Price Risk and Note 23 to our audited financial statements.

*Ship-or-pay commitments.* In order to support the financing for the Bolivia-Brazil pipeline, 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, respectively. TBG's portion of the pipeline financing is consolidated in our balance sheet. Our volume obligations under the ship-or-pay arrangements are generally designed to meet the gas purchase obligations with respect to our gas purchase contracts with YPF. 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 Bolivia-Brazil gas pipeline. The total estimated project cost was U.S.\$1.9 billion. In 2004, 2003 and 2002, Petrobras made total payments of approximately U.S.\$488 million, U.S.\$443 million and U.S.\$253 million, respectively. Of these amounts, approximately U.S.\$260 million, U.S.\$246 million and U.S.\$205 million corresponded, respectively, to payments made to TBG for the transportation of natural gas. Set forth below are the minimum volumes we have agreed to under the ship-or-pay arrangements, 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**

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Volume Commitment (Mmcmd)	29.43	29.43	29.43	29.43	29.43
Volume Commitment (Mmcfpd)	1006	1006	1006	1006	1006
Estimated Payments (U.S.\$ million)(1)	650	650	650	650	650

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

Additionally, Petrobras Energia S.A., or PESA, has a 15-year ship or pay agreement for 80,000 barrels per day through the OCP pipeline in Ecuador. Estimated payments respective to the commitment are approximately U.S.\$304 million for the next five year term, and U.S.\$863 million total contract value. In January 2005, PESA entered into a provisional sale agreement with Teikoku Oil Co., based in Japan, subject to final approval by the Ministry of Energy of Ecuador. Upon approval, PESA will transfer 40% of its

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rights and interest in Blocks 18 and 31 and the corresponding rights and obligations, including in the OCP, to Teikoku Oil Co. See International Ecuadorian Activities.

*Natural gas sales contracts.* In light of these gas purchase and ship-or-pay obligations, we have entered into or negotiated firm gas sale 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. Our total sales of natural gas, which includes sales to thermoelectric companies, for 2004, 2003 and 2002, were approximately U.S.\$1,876 million, U.S.\$1,580 million and U.S.\$952 million, respectively. The table below sets forth the commitments by local gas distribution companies and by thermal power plants for the firm purchase of volumes of natural gas from us beginning in 2005, together with an estimate of the amounts obligated to be paid for such volumes:

**NATURAL GAS SALES CONTRACTS(1)**

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
	(in Mmscfd)(1)				
To Local Gas Distribution Companies					
Related parties(2)	566	623	706	777	840
Third parties	591	643	713	778	843
To Power Generation Plants					
Related parties(2)(4)	211	230	266	338	341
Third parties	88	74	81	88	97
Total	<u>1,456</u>	<u>1,570</u>	<u>1,766</u>	<u>1,981</u>	<u>2,121</u>
Estimated Contract Receipts (U.S.\$ million)(3)	<u>\$ 1,717</u>	<u>\$ 1,851</u>	<u>\$ 2,082</u>	<u>\$ 2,336</u>	<u>\$ 2,501</u>

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

(2) For purposes of this table, related parties include all local gas distribution companies and power generation plants in which we have an equity interest and third parties refer to those in which we do not have an equity interest.

(3) Amounts calculated based on estimated budgeted receipts, which are indexed in relation to current prices set forth under the agreements converted into U.S. dollars based on an exchange rate of R\$3.0147 to U.S.\$1.0. Prices may be adjusted in the future and actual amounts may vary.

(4) Power generation related parties volumes are based on projected consumption of gas which is less than full sales contract value.

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*Pricing.* On June 1, 2001, the Brazilian government instituted a mechanism which allows a U.S. dollar indexed component of the natural gas pricing mechanism to be passed through to 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. This mechanism has enabled 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-year 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.

### *Renegotiation of the GSA*

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

Since November 2002, we, or the Brazilian government on our behalf, have been attempting to renegotiate the terms of the GSA with YPFB to achieve reductions in the volume and price of natural gas we are required to purchase under the GSA. This renegotiation has been suspended due to the political instability in Bolivia. We cannot

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predict whether such renegotiation will continue in the future. See Risk Factors Risks Relating to our Operations We are subject to substantial risks relating to our international operations, in particular in Latin America and the Middle East.

*Incentives to Distribution Companies.* In order to accelerate the expansion of the natural gas market in Brazil, increase consumption and ultimately reduce the financial exposure from our ship-or-pay commitments, we announced in December 2003 a new program of discounts for natural gas distributors in certain regions of Brazil. Distributors in the states of São Paulo, Minas Gerais, Paraná, Santa Catarina, Rio Grande do Sul, and Mato Grosso do Sul will pay a discounted price for volumes sold in addition to contracted amounts, establishing also a ceiling price. If actual amounts sold exceed 40% of contracted amounts, we would reduce the base price according to a progressive schedule. Due to changes in the electricity market and in oil prices this program has been discontinued, except for the ceiling price.

### *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 86% 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 Thermoelectric Priority Program (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 of the Brazilian Real in each of 2001 and 2002, 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.

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

Due to decreased rainfall in 2000 and 2001 in Brazil and the subsequent shortfall of hydroelectric power to meet Brazilian demand, the Brazilian government implemented a rationing program from the beginning of June of 2001 until the end of February 2002. This 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, since the end of the rationing program, heavy rains have filled the main reservoirs of the country. As a result, in the short term, existing hydroelectric capacity is sufficient to meet the energy needs of the

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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.

### New Regulatory Model

A new regulatory model for the power sector was introduced on March 16, 2004 with the enactment of the New Industry Model Law. Under the new model, energy may be sold under regulated contracts or free contracts. Energy sold under regulated contracts must be acquired by means of public auctions and energy sold under the free market is negotiated freely through bilateral contracts. The new regulatory model also creates incentives for the investment in power generation.

The first energy auction for existing power plants occurred in December 2004. The first auction for new power plants will occur in 2005. We may participate in such auction to sell energy from our thermo power plants with the intention of securing long-term contracts under prices that will generate good returns.

The effects of the new regulatory model on our operations are still uncertain, since most of the changes introduced by the new law have yet to be tested.

### 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.

Although our Strategic Plan calls for an increase in capacity, our plans will ultimately depend upon the level of demand for electricity in general and the success of our electricity marketing efforts. Nonetheless, we intend to acquire a significant number of thermoelectric plants in 2005, especially thermoelectric plants to which we owe contingent payments in order to reduce our financial exposure.

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Following this strategy, on April 29, 2005, we acquired Sociedade Fluminense de Energia (SFE), the owner of the Eletrobolt thermoelectric plant, a plant with a capacity of 388 MW located in Seropédica in the State of Rio de Janeiro. We acquired SFE from a group of banks for a purchase price of US\$65 million. We have also signed a term sheet on March 24, 2005 for the acquisition of the Termoeará thermoelectric plant from MPX for US\$137 million (including the assumption of indebtedness). The execution of a definitive acquisition agreement is subject to certain conditions precedent, including the conclusion of a due diligence of the company. Finally, we also own 100% of TermoRio S.A, an independent power producer under construction. We initially owned 50% of TermoRio S.A., and the remaining 50% was owned by NRG. In April 2002, NRG exercised a put option requesting us to buy its shares and credits in TermoRio. The put option was subject to an arbitration proceeding that ended in February 2005 and required us to purchase NRG's interest in TermoRio for approximately U.S. \$83 million.

The main purpose of these acquisitions was to reduce our financial exposure in connection with these merchant thermal power plants. See Financial Exposure.



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## 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 to such thermoelectric power plants. Our obligations under these agreements are either structured as:

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

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

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

**POWER OFFTAKE PROJECTED COMMITMENTS(1)**

	<u>2005</u>	<u>2006</u>	<u>2007</u>
	(Average MW)		
NE Tolling Arrangements with consolidated entities	190	190	150
NE Tolling Arrangements with unconsolidated entities	25	25	65
<b>Total NE Tolling Arrangements</b>	<b>215</b>	<b>215</b>	<b>215</b>
S/SE Tolling Arrangements with consolidated entities	1,680	1,680	1,680
S/SE Tolling Arrangements with unconsolidated entities	320	320	480
<b>Total S/SE Tolling Arrangements</b>	<b>2,000</b>	<b>2,000</b>	<b>2,160</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 3,645 MW as of the end of 2004, of which 2,215 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 consumption in our facilities, estimated to be approximately 300 MW per year, equally allocated between the Northeast and South/Southeast regions of Brazil, as well as 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

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shorter-term contracts. As of April 1, 2005, PPAs included offtake commitments totaling 2,370 average MW for 2005, 1,630 average MW for 2006 and 1,700 average MW for 2007, 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.

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We continue to have contractual commitments related to our energy operations which would be payable to third parties. These contractual commitments include the purchase of energy, supply of natural gas and reimbursement of operating expenses of thermoelectric power plants. These commitments were incurred in connection with the PPT. Our energy commitments include the following:

a commitment to make contingent payments for the Macaé Merchant, Eletrobolt and Termoeará 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 such costs and expenses. At December 31, 2004, the maximum amount of these future contingent payment was approximately U.S.\$326 million for 2005. With our acquisition of Eletrobolt in April 2005, we cancelled our contingent payment obligation to Eletrobolt and upon consummation of the acquisition of Termoeará we intend to cancel our contingent payment obligation to Termoeará. In March 2005, we initiated an arbitration proceeding relating to our commitments to the Macaé Merchant thermoelectric power plant. As a result of our adoption of FIN 46, we consolidate the results of these three thermoelectric power plants; and

a commitment to supply natural gas for the production of energy at the Termorio, Termobahia, Ibiritermo, Três Lagoas, UTE Canoas and Nova Piratininga thermoelectric power plants, and to purchase part or all the energy generated by TermoBahia and Ibiritermo at a price that remunerates invested capital. At December 31, 2004, the maximum future amount related to the supply agreement was approximately U.S.\$10 billion for the period from 2005 to 2023.

Employing a discount rate of 12.0% per year, the net present value of the maximum financial exposure of the energy segment is approximately U.S.\$855 million at December 31, 2004.

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). 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. This arbitration proceeding is currently pending. As of December 2003, the capacity payments would have totaled approximately U.S.\$72 million if the PPA had remained in effect.

## **International**

### *Summary and Strategy*

In 2004, approximately 10.9% of our net revenues were generated outside Brazil. We seek to evolve from an integrated oil and gas company in Brazil to an energy industry leader in Latin America and a strong international player. 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 the natural gas network 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.\$7.5 billion in capital expenditures for the period from 2004 to 2010 for all of our international investments.

Our main strategies in the international segment are to:

seek a leadership position as an integrated energy company throughout Latin America;

expand exploration and production operations, in the Gulf of Mexico and Western Africa.

accelerate monetization of our natural gas reserves;

expand our international opportunities to grow and diversify our portfolio of international activities;

broaden the recognition and increase the value of the Petrobras brand name outside of Brazil; and

add value to the production of Petrobras heavy oil.

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

*Exploration and Production*

During 2004 we conducted significant international exploration activities in Angola, Argentina, Bolivia, Colombia, Nigeria, the United States and Venezuela. In addition, we are currently performing studies to evaluate blocks where we hold interests in Angola, Argentina, Colombia, Mexico, Nigeria and the United States. Production activities were conducted in Angola, Argentina, Bolivia, Colombia, Ecuador, Peru, the United States and Venezuela. Collectively, these activities represented approximately 12.7% of our total capital expenditures for crude oil and natural gas exploration and production. Our capital expenditures for international exploration and development were U.S.\$666 million for 2004, U.S.\$428 million for 2003 and U.S. \$224 million for 2002. The following table provides information about the allocation of such expenditures for each of 2004, 2003 and 2002:

**DISTRIBUTION OF INTERNATIONAL EXPLORATION ACTIVITIES**

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Argentina	3.1%	5.6%	3.7%
Bolivia	0.2	0.7	12.6
Colombia	3.5	4.4	11.8
PEPSA <sup>(1)</sup>	2.4	28.7	
South America	9.2	39.4	28.1
West Coast of Africa	52.0	15.6	41.6
Gulf of Mexico	36.8	42.5	24.4
Others	2.0	2.5	5.9
Total	100.0%	100.0%	100.0%

<sup>(1)</sup> Includes Argentina, Ecuador and Venezuela.

*Development*

Over the past three years, we have participated in the development of a number of fields internationally. These include: many fields in Argentina concentrated in Neuquen and Austral basins (the most important fields were Medanito, Puesto Hernandez, Rio Néuquen, Santa Cruz I and Santa Cruz II), three in Bolivia (San Alberto, San Antonio, and Colpa Caranda), six in Colombia (Guando, Rio Ceiba, Yaguara, Venganza, Purificación and Revancha), two in the United States (GB 200 and North Coulomb), one in Angola (Tubarão), one in Nigeria (Agbami), two in Ecuador (Block 18 and Block 31), one in Peru (Lote X) and four in Venezuela (Ortiupano-Leona, Mata, Acema and La Concepción).

In 2004, our net production outside of Brazil averaged 168,489 barrels per day of crude oil and NGLs and 94,150 barrels of oil equivalent of natural gas per day at an average lifting cost of U.S.\$2.60 per barrel. The following table provides information on the allocation of our international development activities for each of 2004, 2003 and 2002.



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	<u>2004</u>	<u>2003</u>	<u>2002</u>
Argentina	41.9%	62.2%	7.1%
Peru	10.9		
Ecuador	7.4		
Bolivia	1.5	7.1	45.8
Colombia	6.8	14.3	21.1
Venezuela	28.4		
	<u>          </u>	<u>          </u>	<u>          </u>
South America	96.9	83.8	74.0
West Coast of Africa	1.4	14.7	23.1
Gulf of Mexico	1.7	1.5	2.9
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
	<u>          </u>	<u>          </u>	<u>          </u>

*Argentine Activities*

With our acquisition of 58.6% of PEPSA (formerly Perez Companc), which owned 98.2% of PESA (formerly PECOM Energía S.A.), in 2002, we reinforced our position as an exploration and production leader in South America, especially in Argentina, where we already maintained activities. As of December 31, 2004, our combined crude oil and natural gas proved reserves in Argentina were approximately 393 million barrels of oil equivalent, approximately 59% of which were proved developed reserves and approximately 41% of which were proved undeveloped reserves. In 2004, we drilled three exploratory wells in Argentina, which resulted in two discoveries, the Puesto Olivério and Estación Agua Fresca Fields in the Austral Basin.

PESA's production in Argentina is concentrated in the Neuquén and Austral Basins. PESA owns 579 thousand net acres under production concessions in the Neuquén Basin and 2,632 thousand net acres under production concessions in the Austral Basin. Our gross production acreage in Argentina amounted to 4,027 thousand acres (3,211 thousand net), and we have a total of 2,536 gross productive wells (1,498 thousand net). For the year ended December 31, 2004, our combined crude oil and natural gas production in Argentina averaged 114.5 thousand barrels of oil equivalent per day.

In the downstream segment we have a refining capacity of 69 thousand barrels per day, distributed in two refineries operating with a throughput rate of 91%. We also have a 28.5% interest in Refinaria Del Norte. We also participate in the retail sector in Argentina, where we currently own 727 retail service stations that operate under the brand names Petrobras (330 stations), Eg3 (337 stations) and San Lorenzo (60 stations).

We also participate, through PESA, in petrochemical businesses, in which we have three plants, Puerto General San Martin, Zarate and Campana in Argentina, where we also have a 40% participation in Petroquímica Cuyo. We also own a petrochemical plant in Brazil, INNOVA, through PESA.

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We own a 34% participation in the MEGA project (representing a total investment of U.S.\$728 million), a joint venture among us, Repsol-YPF and Dow Chemical to fractionate natural gas liquids. The project consists of a natural gas processing plant in Loma La Lata (Province of Neuquén), a 600 km extension pipeline and a separating plant and port, storage and effluent treatment facilities in Bahía Blanca (Province of Buenos Aires). We are obligated under an off-take contract to take minimum volumes of LPG and natural gasoline, if delivered, at market prices.

The sponsors financed approximately 70% of the project costs with a U.S.\$472 million loan from commercial banks and other institutional lenders. The loan was structured to be non-recourse to the sponsors following the termination of sponsor completion guarantees to the lenders during the construction period for their respective shares in the project (Repsol-YPF 38%, Petrobras 34%, and Dow Chemical 28%). The guarantees were originally set to expire on December 31, 2001, but were subsequently extended to December 31, 2003.

While the MEGA project reached mechanical completion and met or exceeded the performance tests established for the release of the sponsors guarantees, the lenders maintained that other conditions required for the release were



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not met. The sponsors agreed in December of 2003 to extend their guarantees until December 31, 2005 and to permit all lenders the right to put their MEGA notes to the sponsors immediately prior to the guarantees' expiration. In addition, the sponsors granted MEGA's fixed rate noteholders the right to exercise their put immediately. In turn, the sponsors were granted call option rights to redeem MEGA notes. On January 15, 2004, all fixed rate noteholders exercised their put option rights. As a result of these events, we purchased our respective share of MEGA's fixed rate notes (U.S.\$58 million). On December 2004, we exercised our call option right (U.S.\$54 million) in connection with our share of MEGA's floating rate notes in the same manner as the other shareholders. Also, in December 2004, MEGA pre-paid all the floating rate notes to the noteholders, canceling them. The remaining, fixed rate notes issued by MEGA are owned by its shareholders. In December 2004, the shareholders entered into a Waiver Agreement to amend the covenants of the Indenture governing the notes to restrict certain financial operations by MEGA.

Regarding the Gas and Energy sector, we participate, through PESA, as shareholder in TGS, which owns a 7,400 km extension pipeline with a transport capacity of 62 MMcmd and a gas processing plant located in Bahía Blanca, with a processing capacity of 42 million MMcmd.

As far as the electricity assets in Argentina, also through PESA, we cover the entire productive chain. We account for 6.5% of the country's electricity generation through our ownership interests in three generation plants: two hydroelectric (Piedra Del Águila and Pichi Picún Leufú) and one thermoelectric (Genelba). We also have an interest in Transener, Argentina's largest transmission company and owner of 95% of Argentina's high-tension network. PESA also maintains an important presence in the central area of Buenos Aires, an area with more than 2.1 million customers, through Edesur, Argentina's largest energy distribution company by volume.

On January 21, 2005, special shareholders' meetings of each of PESA, EG3 S.A., or EG3, Petrobras Argentina S.A., or PAR, and Petrolera Santa Fe SRL, or PSF, approved the merger of the latter three companies into PESA. PESA is the surviving entity from the merger. Prior to the merger, through our subsidiary PPSL, we held a 99.6% interest in EG3 and a 100% interest in each of PAR and PSF. Pursuant to the merger, PPSL received 230,194,137 newly issued class B shares of PESA, representing 22.8% of PESA's capital stock. As a result, the interest of PPSA in PESA declined to 75.8%. Considering our 58.62% participation in PPSA, we now own a 67.2% total indirect participation in PESA.

EG3 was mainly engaged in the refining and processing of oil and oil by-products and the distribution and marketing of liquid and gaseous fuels, and lubricants through gas stations and fuel retail outlets. EG3 had a refinery located at Bahía Blanca, Buenos Aires, with a crude processing capacity of approximately 31,000 barrels per day. EG3 had a wide network of gas stations (approximately 621) throughout the country that operate under the Petrobras and EG3 brands.

PAR was mainly engaged in oil and gas production. PAR owned a concession for a production area at the Noroeste basin, with a production volume of approximately 7,000 barrels of oil equivalent per day and proved reserves of 17 million barrels of oil equivalent as of December 31, 2004.

PSF was engaged in oil and gas production. PSF had concessions for five oil fields, which were located in the Neuquén, San Jorge and Cuyana basins. These fields had an aggregate production volume of approximately 12,000 barrels of oil equivalent per day and proved reserves of 78 million barrels of oil equivalent as of December 31, 2004.

During 2005, PESA prepaid the total outstanding principal amount of certain Class K and M notes under its Global Notes Program in a total amount of US\$335 million. In connection with these series of notes, PESA was subject to compliance with certain covenants, including restrictions on payments of dividends and capital expenditures. As a result of the prepayment, its obligations under these covenants are no longer in effect. PESA also prepaid the outstanding amount of Class C medium term notes for US\$63 million.

*Bolivian Activities*

As of December 31, 2004, our combined crude oil and natural gas proved reserves in Bolivia were approximately 336 million barrels of oil equivalent, all of which were proved developed reserves. Approximately

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89% of our proved developed reserves in Bolivia are natural gas reserves. We did not drill any new exploration wells in Bolivia in 2004.

We have a 35% interest in the San Alberto and San Antonio gas fields (the other partners are Empresa Petrolera Andina (50%) and Total Bolivia (15%)). For the year ended December 31, 2004, our combined crude oil and natural gas production in Bolivia averaged 45.5 thousand barrels of oil equivalent per day.

We own 44.5% of the shares of Transierra S.A, the owner and operator of the Yacuiba-Rio Grande gas pipeline (GASYRG), a pipeline in Bolivia that connects the gas fields in the south of Bolivia to the Bolivia-Brazil pipeline. Presently the pipeline has a capacity of 17 MMcmd, and installation of another compression unit will increase the capacity to 23 MMcmd. Investment for this project totaled more than U.S.\$375 million. We also provided all the capital for the San Marcos pipeline, which transports natural gas to the city of Puerto Suárez (Bolivia), on the Brazilian border.

We acquired an interest in a natural gas compression plant in Rio Grande, Bolivia, which has a capacity to compress up to 1,546 million cubic feet per day.

We have a 100% interest in Empresa Boliviana de Refino (EBR). EBR owns two Bolivian refineries located in Cochabamba and Santa Cruz de la Sierra, with an estimated maximum production capacity of 60,000 barrels of crude oil per day. EBR wholly owns Empresa Boliviana de Distribución, or EBD, a company with a network of 103 gas stations.

### *Venezuelan Activities*

PESA's exploration and production rights in Venezuela are held under operating service contracts. In 1994 Petróleos de Venezuela S.A. (PDVSA) awarded our first contract at the Oritupano-Leona field. As of December 31, 2004, PESA's combined crude oil and natural gas proved reserves in Venezuela were approximately 281 million barrels of oil equivalent, approximately 45.7% of which were proved developed reserves and approximately 54.3% of which were proved undeveloped reserves.

As of December 2004, PESA had four production fields in the country. PESA's gross production acreage in Venezuela amounted to 585 thousand acres (379 thousand net), and PESA has a total of 667 gross productive wells (430 thousand net). For the year ended December 31, 2004, PESA's combined crude oil and natural gas production in Venezuela averaged 51.3 thousand barrels per day.

### *Ecuadorian Activities*

In Ecuador, PESA operates Blocks 18 and 31. As of December 31, 2004, PESA held a 70% and 100% interest in Block 18 and 31, respectively.

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Block 18 is located in the Oriente basin of Ecuador, having a significant potential of 28° to 33° API light crude oil reserves. The concession for production activities in Block 18 is for an initial 20-year term from October 2002. Once this term expires, Ecuadorian hydrocarbon laws provides for the possibility of an additional five-year extension period.

Block 18 production accounted for 3.8% of PESA's total average production in barrels of oil equivalent in 2004. It has seven productive wells, one is located at the Pata field and six are located at the Palo Azul field. In addition, the area has early production facilities that can handle a daily gross production of 20,000 barrels per day. In 2004, PESA started to expand production facilities and build an oil pipeline with a view to increasing production to approximately 50,000 barrels per day by the end of the first semester of 2005. In addition, construction started in connection with the definitive oil pipeline for transportation of the block production.

Block 31 is located in a highly sensitive ecological area of the Amazon jungle in the central part of the eastern border of the upper Amazon basin and covers an area of 494 thousand net acres. Pursuant to the block's production sharing agreement between Petroecuador and PESA, Petroecuador is entitled to a crude oil production share ranging between 15% and 17%, depending on the field's daily crude oil production and crude oil gravity.

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PESA has conducted extensive exploratory work in Block 31, including the drilling of four exploratory wells, which led to the discovery of the Apaika/Nenke, Obe, and Minta fields. Significant investments are required to the development, but changes in PESA's investment strategy following the Argentine crisis have resulted in a redefinition of the amounts and timing of the original investment plan.

In August 2004, the Minister of Energy of Ecuador approved an environmental impact study, completing all of the required steps for the approval of the development plan with a 20-year exploitation period. In the initial three-year period, the plan contemplates investments of U.S.\$75 million, and an obligation to provide Petroecuador with a guaranty of 20% of this amount. In December 2004, as part of these contemplated investments, PESA commenced construction of a pier on the Napo River.

Future oil production in Block 31 will be shipped through a heavy crude oil pipeline known as OCP. PESA has entered into a 15-year ship-or-pay transportation contract under which OCP has committed to provide it with a shipping capacity of 80,000 barrels per day.

In January 2005, we entered into an agreement with Teikoku whereby, after obtaining approval by the Ministry of Energy of Ecuador, we will transfer 40% of our rights and interest in Blocks 18 and 31. In addition, once production in Block 31 reaches an average of 10,000 barrels of oil per day for a period of 30 consecutive days, Teikoku has agreed to assume 40% of the rights and obligations resulting from the crude oil transportation agreement entered into with OCP.

As of December 31, 2004, PESA's crude oil proved reserves in Ecuador were approximately 53 million of barrels of oil and its oil production averaged 6.2 thousand barrels per day.

### *Peruvian Activities*

Through PESA, we have the rights to oil and gas production in Lote X, a 116 thousand acre block in Peru's Talara Basin. As of December 2004, Lote X had 2,366 production wells. PESA has entered into a long-term sales contract under which Perupetro (the Peruvian state-owned company) is obligated to purchase all of the production from Lote X at market prices. The sales contract expires in 2006. As of December 31, 2004, PESA's combined crude oil and natural gas proved reserves in Peru were approximately 105 million of barrels of oil equivalent and its combined oil and gas production averaged 12.8 thousand barrels per day.

### *Uruguayan Activities*

In December 2004, we entered the Uruguayan market through the acquisition of 55% of the voting shares of Conecta S/A, which is one of the two local gas distribution companies operating in Uruguay, for U.S.\$3.2 million. The other 45% of the Conecta's voting shares remains with the state-owned Administración Nacional de Combustibles Alcohol y Potland - ANCAP.

Conecta operates approximately 300 km of gas pipelines, and has exclusivity to supply small to medium size consumers with demand of up to 5,000 cmpd. Conecta presently has 4,200 clients from approximately 4,100 residences. We estimate that this represents 10% of the market located in the neighborhood of the gas pipelines in the cities of Paysandu and Ciudad del a Costa. Conecta's revenues in 2004 were US\$2.7

million.

*Colombian Activities*

During 2004, we signed two new contracts in Colombia, acquiring interests in the Tayrona (40%) and Villanueva (50%) Blocks. We drilled one wildcat well in Monicongo, which did not result in a commercially feasible discovery.

We have interests in seven exploration contracts and seven production contracts in Colombia. We are the operating company in 12 of these contracts. Under these contracts, we drilled a total of 42 wells, 33 of which were located in Guando.

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As of December 31, 2004, our combined crude oil and natural gas proved reserves in Colombia were approximately 37 million of barrels of oil equivalent and our combined oil and gas production averaged 16.8 thousand barrels per day.

### *African Activities*

We have interests in four blocks in Nigeria and we are the operating company in one of them. In 2004, we drilled one successful well in Egina, operated by Total, and four in Agbami, operated by Chevron Texaco. The Agbami well is currently being developed and the Egina field is under appraising. We also were successful in drilling our first deepwater well outside Brazil, which set new depth records in Nigeria.

Our Angolan branch of our wholly-owned subsidiary, Petrobras International Braspetro B.V., has continued to perform as a non-operating partner in two licenses under petroleum sharing agreements. No exploratory drilling was carried out in Angola during 2004. As of December 31, 2004, our combined crude oil and natural gas proved reserves in Angola were approximately 12 million of barrels of oil equivalent and our oil production averaged 10.4 thousand barrels per day.

In 2004, we signed a joint production agreement with the Tanzania government and the state-owned oil company Tanzania Petroleum Development Corporation (TPDC). This agreement provides for the exploration of Block 5, which has an extension of 9,250 square kilometers and is located in the Mafia Basin at water depths of 300 to 3000 meters. The agreement will be in force for up to 11 years. In 2005, we will conduct geological studies to determine whether additional seismic acquisitions will occur.

On March 12, 2005, we signed an exploration and joint production agreement with Libya's state-owned National Oil Corporation (NOC). This agreement provides for the exploration of four blocks in Area 18, which has an extension of 10307 square kilometers and is located in the Mediterranean Sea at water depths of 200 to 700 meters. We own a 70% interest in a consortium with Oil Search Limited (OSL) and will be the operating company in the area. Under the agreement, the exploration phase will last five years and may be extended for 20 more years if discoveries are made. A total of US\$21 million will be invested in the exploration phase and we will be required to drill a well and conduct seismic evaluations.

### *Middle East Activities*

In 2004, we signed a contract with Iran's state-owned company National Iranian Oil Company (NIOC) for the exploration of Block Tusán in shallow waters of the Persian Gulf. We own a 100% interest in this block. The exploration will be carried out by our Iranian subsidiary Petrobras Middle East B.V., which was organized in October 2004. We are currently evaluating other exploration opportunities in the Middle East.

### *Gulf of Mexico Activities*

Petrobras America, Inc., or PAI, our wholly-owned subsidiary, continues to expand its activities in the Gulf of Mexico's deep and ultra-deep waters 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

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Management Service. As of December 31, 2004, PAI held participations in 222 offshore blocks in the Gulf of Mexico in shallow to ultra-deep waters.

In 2004, PAI participated in the drilling of four exploration wells (three wildcats and one appraisal). One of the wildcat wells resulted in the discovery of gas in the Coulomb North field, in which we have a 33.3% participation. This discovery set a new world record for production in deep waters at depths of 7,549 feet (2,301 meters). The production in this well started 78 days after its discovery. PAI also participated in the drilling of an appraisal well in St. Malo (25% participation), which resulted in an increase of the initial reserve estimates.

In 2003, as part of the bidding launched by Petróleos Mexicanos (PEMEX) for the operation of areas under multiple service contracts, contracts for the Cuervito and Fronterizo blocks were awarded to a joint venture composed of us (45% interest), the Japanese company Teikoku (40%) and the Mexican company Diavaz (15%).



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There are 12 gas discoveries in this block, which will be developed with a total expenditure of U.S.\$510 million. In 2004, we started the development and production of these discoveries by drilling eight production wells.

In 2004, we acquired new exploration acreage by acquiring (1) rights to explore 37 new blocks (most of them located in the under explored Corpus Christi region) through our participating in the Lease Round 192 and (2) an interest in the Treasure Bay Project, comprising 60 blocks, through a farm-in deal.

## **PIFCo**

PIFCo was established on September 24, 1997 as a wholly-owned subsidiary of Braspetro Oil Services Company, or Brasoil, a wholly-owned subsidiary of Petrobras Internacional S.A. (Braspetro), which has since been absorbed by us. PIFCo was initially incorporated under the name Brasoil Finance Company, which was changed by special resolution of PIFCo's shareholders to Petrobras International Finance Company on September 25, 1997. On January 14, 2000, the board of directors of Braspetro and Petrobras approved the transfer of 100% of PIFCo's voting shares from Brasoil to us. Since April 1, 2000, PIFCo has been our wholly-owned subsidiary.

PIFCo is a tax exempt company incorporated with limited liability under the laws of the Cayman Islands. PIFCo's registered office is located at Anderson Square Building, P.O. Box 714, George Town, Grand Cayman, Cayman Islands, and PIFCo's telephone number is 55-21-3224-1410.

### *PIFCo Business Overview*

PIFCo was incorporated in order to facilitate and finance the import of crude oil and oil products by us into Brazil. Accordingly, PIFCo's primary function is to act as an intermediary between third-party oil suppliers and us by engaging in crude oil and oil product purchases from international suppliers and reselling crude oil and oil products in U.S. dollars to us on a deferred payment basis, at a price which includes a premium to compensate PIFCo for its financing costs. PIFCo is generally able to obtain credit to finance purchases on the same terms granted to us, and PIFCo buys crude oil and oil products at the same price that suppliers would charge us directly.

As part of our strategy to expand our international operations and facilitate our access to international capital markets, PIFCo engages in borrowings in international capital markets supported by us, primarily through standby purchase agreements.

In addition, PIFCo also engages in a number of activities that are conducted by three wholly-owned subsidiaries:

Petrobras Europe Limited, or PEL, a United Kingdom company that acts as an agent and advisor in connection with our trading activities in Europe, the Middle East, the Far East and North Africa;

Petrobras Finance Limited, or PFL, a Cayman Islands company, that carries out a financing program supported by future sales of bunker fuel and fuel oil; and

Bear Insurance Company Limited, or BEAR, a company incorporated in Bermuda that contracts insurance for us and our subsidiaries.

In January 2003, PIFCo transferred Petrobras Netherlands B.V., or PNBV, a Dutch company engaged in leasing activities of primarily offshore equipment to be used by us for exploration and production of crude oil and natural gas, to us as part of our restructuring of our international business segment. PNBV became our wholly-owned subsidiary, effective as of January, 2003.

Beginning in 2004, as part of our restructuring of our offshore subsidiaries in order to centralize trading operations, PIFCo has engaged in limited exports of oil and oil products.

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### PIFCo's Principal Commercial Activities

PIFCo's principal activity is the purchase of crude oil and oil products for resale to us and, to a limited extent, third parties. PIFCo acquires substantially all of its crude oil and oil products either through purchases on the spot market or short-term supply contracts. PIFCo acquires a small portion of its crude oil and oil products through long-term supply contracts. PIFCo's crude oil and oil product purchase obligations are, in most instances, guaranteed by us. PIFCo sells the products to us at the purchase price it paid, plus a premium, determined in accordance with a formula designed to pass on PIFCo's average costs of capital to us.

In addition, PIFCo finances its oil trading activities principally from commercial banks, including lines of credit and commercial paper programs, as well as through inter-company loans from us and the issuance of notes in the international capital markets.

The following chart illustrates how PIFCo acts as the intermediary between international crude oil suppliers and us.

PIFCo purchases crude oil and oil products from international oil suppliers on a free-on-board (F.O.B.) basis under standard terms that traditionally require payment within 30 days from the bill of lading. We buy crude oil and oil products from PIFCo under terms that allow for payment up to 330 days from the date of the bill of lading. Before February 2005, we bought crude oil and oil products from PIFCo under terms that allowed for payment up to 270 days from the date of the bill of lading. We would typically be unable to meet the 30-day payment term imposed by international suppliers because of the complexity of Brazilian customs and importing regulations. For example, if a shipment to which a bill of lading relates must be delivered to different parts of Brazil, different sets of documents must be delivered to each delivery point. Depending on the unloading ports' locations, this process may be completed up to 120 days from the vessel's departure. Because PIFCo is not subject to the Brazilian regulations applicable to us, PIFCo can pay the international supplier on time without having to produce these different sets of documents. To cover its financing costs, PIFCo includes a premium when it sell crude oil and oil products to us.

PIFCo's subsidiaries are:

Petrobras Europe Limited (PEL)

In May 2001, PIFCo established PEL, a wholly-owned subsidiary incorporated and based in the United Kingdom, to consolidate our trade activities in Europe, the Middle East, the Far East and North Africa. These activities consist of advising on, and negotiating the terms and conditions for, crude oil and oil products supplied to PIFCo and us, as well as marketing Brazilian crude oil and crude oil products exported to the geographic areas in which PEL operates. PEL plays an advisory role in connection with these activities and undertakes no direct or additional commercial or financial risk. PEL provides these advisory and marketing services as an independent contractor, pursuant to a services agreement between PEL and us. In exchange, we compensate PEL for all costs incurred in connection with these activities, plus a margin.

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### Petrobras Finance Limited (PFL)

In December 2001, PIFCo established PFL, a wholly-owned subsidiary incorporated and registered in the Cayman Islands. PFL primarily purchases bunker and fuel oil from us and sells the products in the international market in order to generate export receivables to cover its obligations to transfer these receivables to a trust under an exports prepayment program. The exports prepayment program helps provide PFL with the funding necessary to purchase oil products from us, as described below.

### Bear Insurance Company Limited (BEAR)

In January 2003, PIFCo received BEAR from Brasoil. This transaction took place as part of the restructuring of our international business segment. BEAR currently serves as an intermediary for us, advising on, and negotiating the terms and conditions of, certain of our insurance policies.

### Exports Prepayment Program

We sell and deliver bunker fuel and fuel oil and, subject to certain conditions, other oil products (collectively, the Eligible Products ) to PFL under two principal agreements: Master Export Contract and the Prepayment Agreement. The PF Export Receivables Master Trust, or the Trust, was formed under the laws of the Cayman Islands to provide PFL with the funding necessary to purchase Eligible Products from Petrobras and resell these products through the arrangements described below.

On December 21, 2001, the Trust issued to PFL U.S.\$750 million of Senior Trust Certificates in four series (collectively, the Series 2001 Senior Trust Certificates ) and U.S.\$150 million of Junior Trust Certificates (the Series 2001 Junior Trust Certificates, and together with the Series 2001 Senior Trust Certificates, the Series 2001 Trust Certificates ). PFL in turn offered the Series 2001 Senior Trust Certificates in four series (series A-1, A-2, B and C) to certain certificate holders.

On May 21, 2003, the Trust issued to PFL U.S.\$550 million of Senior Trust Certificates (the Series 2003-A Senior Trust Certificates ), maturing on June 1, 2015. On the same date, the Trust issued U.S.\$200 million of Senior Trust Certificates (the Series 2003-B Senior Trust Certificates ), maturing on June 1, 2013. The Series 2003-A Senior Trust Certificates, along with the Series 2003-B Senior Trust Certificates and the Series 2001 Senior Trust Certificates, represent senior undivided beneficial interests in the property of the Trust (other than certain charitable property held by the Trust).

On the same date, the Trust also issued to PFL U.S.\$110 million in Series 2003-A Junior Trust Certificates and U.S.\$40 million in Series 2003-B Junior Trust Certificates (collectively, the Series 2003 Junior Trust Certificates, and together with the Series 2003-A Senior Trust Certificates and the Series 2003-B Senior Trust Certificates, the Series 2003 Trust Certificates ). The Series 2003 Junior Trust Certificates represent, together with the 2001 Junior Trust Certificates, junior subordinated undivided beneficial interests in the property of the Trust (other than the charitable property).

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PFL agreed to transfer to the Trustee, in return for the Series 2001 Senior Trust Certificates and Series 2001 Junior Trust Certificates, the right to a specified amount of receivables to be generated from PFL's sale of Eligible Products with a value equal to the aggregate amount scheduled to be paid in respect of the Series 2001 Senior Trust Certificates and the Series 2001 Junior Trust Certificates. PFL also agreed to transfer the Trustee, in return for the Series 2003 Senior Trust Certificates and Series 2003 Junior Trust Certificates, the right to an additional specified amount of receivables to be generated from PFL's sale of Eligible Products with a value equal to the aggregate amount scheduled to be paid in respect of the Series 2003 Senior Trust Certificates and the Series 2003 Junior Trust Certificates.

The value of receivables scheduled to be designated for sale in any quarterly period represents a portion, but not all, of the receivables expected to be generated from the sale of Eligible Products by PFL in such period. The remainder of such receivables remain the property of PFL.

The timely payment of interest on, and scheduled principal of, each series of the Series 2001 Senior Trust Certificates is unconditionally and irrevocably guaranteed under financial guaranty insurance policies issued by XL Capital Assurance Inc., MBIA Insurance Corporation or Ambac Assurance Corporation (collectively, the



Fuel oil originates from residual fractions or distillation units at the refinery and from other processes such as deasphalting. Diluents in the form of lighter cutter stocks are mixed into the residue pool to create the desired viscosity for different types of fuel oil.

Major buyers of Petrobras fuel oil include utilities, refineries and traders. Fuel oil is used by industries and utilities to run machinery and generate electricity. Commercial buildings and homes employ fuel oil for heating purposes, and refineries use fuel oil for blending purposes.

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Fuel Oil Export Sales

The following table sets forth Petrobras fuel oil export sales for the period from 2000 to 2004:

**FUEL OIL EXPORT SALES**

	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Millions of U.S.\$	1,306.1	967.3	697.0	658.0	482.2
Millions of Barrels	47.5	38.4	30.8	31.5	20.1

**Organizational Structure**

All of our 15 direct subsidiaries listed below are incorporated under the laws of Brazil, except PIFCo, Petrobras International Braspetro B.V. (PIB BV), Braspetro Oil Company (BOC), Braspetro Oil Services Company (Brasoil) and Petrobras Netherlands B.V. (PNBV), which are incorporated abroad. See Exhibit 8.1 for a complete list of our subsidiaries.

The following diagram sets forth our significant consolidated subsidiaries as of December 31, 2004:

**Property, Plants and Equipment**

*Petrobras*

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. Our main owned and leased tangible assets consist of our wells, our platforms, our refining facilities, our pipelines, our vessels and other transportation assets and our power plants. Some of these assets are subject to liens but the value of such encumbered assets is not material. See Item 4. Information on the Company for a description of our reserves, sources of crude oil and natural gas, main tangible assets and material plans for expansion and improvements in our facilities.



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### *PIFCo*

PIFCo does not own or lease any material tangible properties or fixed assets. The majority of PIFCo's assets consist of leasehold improvements, computers and furniture. In January 2003, PIFCo transferred its subsidiary PNBV to us as part of our restructuring of our subsidiaries according to the main areas of business.

## **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 Petrobras 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, which was later extended to five 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.

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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 and ADSs are traded on the São Paulo Stock Exchange and the New York Stock Exchange, respectively, we are also regulated by the *Comissão de Valores Mobiliários* (Brazilian Securities Commission, or the CVM) and the *Securities and Exchange Commission*.

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*

Since January 2, 2002, pursuant to Law No. 9,990, and as set forth below, 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 and electricity.

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 established an excise tax 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). As of May 1, 2004, important changes were made regarding the taxation of oil products sales. The PIS/PASEP tax and the COFINS tax previously ad valorem taxes on imported products, were converted into specific value taxes at the following rates:

<b>Product</b>	<b>Tax Rate (Reais/m3, except LPG/metric ton)</b>
Gasoline	R\$261.60
Diesel	148.00
Jet Fuel	71.20
LPG	167.70

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For certain trading transaction, the taxpayer may still opt to pay the PIS/PASEP tax and the COFINS as ad valorem taxes.

The specific tax rates for CIDE, and the amounts paid which could be used as credits against PIS/PASEP and COFINS amounts also changed and are now the following:

	<u>CIDE (R\$/m3)</u>	<u>PIS/COFINS Deduction</u>
Gasoline	280.0	
Diesel	70.0	
Jet Fuel		
Fuel Oil		
LPG		

Since the implementation of the Oil Law in 1997 and through December 31, 2001, the Brazilian oil and gas sector was significantly deregulated and the Brazilian government changed its price regulation policies. Under these regulations, the Brazilian government:

introduced a new methodology for determining the price of oil products 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.

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.

#### Crude Oil and Refined Oil Products

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:

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the Brazilian government deregulated sales prices for crude oil and oil products; and

the Brazilian government established the CIDE, an excise tax payable 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.

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.

### Natural Gas

Our natural gas operation is subject to a number of rules, 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.

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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 certain Brazilian government securities. 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.

### The Petroleum and Alcohol Account

Prior to the deregulation of oil prices in 2002, the Petroleum and Alcohol Account was a special account that reflected the impact on us of the Brazilian government's regulatory policies for the Brazilian oil industry and its fuel alcohol program. From 2002 onwards, the Petroleum and Alcohol Account only reflects the balances existing at the time of price deregulation plus accrued monetary correction to account for inflation.

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). For example, if the cost established by the Brazilian government for crude oil and oil products was lower than our actual costs to import these products, the difference would be recorded as a credit owed by the Brazilian government to us in the Petroleum and Alcohol Account.

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. The net impact on us of our fuel alcohol activities was also recorded in the Petroleum and Alcohol Account.

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 to us, representing the credit owed to us by the Brazilian government from the Petroleum and Alcohol Account. The bonds were placed with a federal depository to support the balance of this account.

The National Treasury Bonds-Series H matured on June 30, 2004. As of June 30, 2004, there were 138,791 National Treasury Bonds-Series H outstanding in the amount of US\$56 million and the balance of the Petroleum and Alcohol Account was US\$241 million. On July 2, 2004, the Brazilian Government made a deposit in an account in our name of US\$56 million for payment of the bonds. However, only US\$3 million of this amount was made available to us. We do not have access to the remaining US\$53 million, which represent a partial guarantee of the balance of the Petroleum and Alcohol Account, according to the determination of the *Secretaria do Tesouro Nacional* (STN). As of December 31, 2003 and 2002, the value of the bonds amounted to US\$59 million and US\$46 million, respectively. 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.

Certification of the Petroleum and Alcohol Account

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The changes in the Petroleum and Alcohol Account in the period from July 1, 1998 to December 20, 2002 are subject to audits by the ANP. The results of the audit will be the basis for settlement of the account with the Brazilian government. The term for settlement of the Petroleum and Alcohol Account had been extended to June 30, 2004, thereby extending the term for certification of the outstanding balance in the Petroleum and Alcohol Account. However, the settlement has not yet occurred.

The ANP/STN Integrated Audit Committee submitted, on June 23, 2004, its final report certifying and approving the balance of the Petroleum and Alcohol Accounts for the period from July 1, 1998 to December 31, 2001, together with monetary restatement through the present date. The conclusion of this audit process for the

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Petroleum and Alcohol account, and the parties' concurrence as to final amount, establishes the basis for concluding the settlement process between the Brazilian government and PETROBRAS.

As defined by Provisional Measure No. 123 dated June 26, 2003, made into Law No. 10.742 dated October 6, 2003, the settlement of accounts should have been completed by June 30, 2004. PETROBRAS has been in contact with the STN with a view to resolving the differences in order to resolve remaining issues between the parties in order to conclude the settlement process as established by Provisional Measure No. 2.181-45, of August 24, 2001.

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 National Treasury Bonds-Series H 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 2004, 2003 and 2002:

	<b>For the Year Ended December 31,</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
	(in millions of U.S. dollars)		
Opening balance	\$ 239	\$ 182	\$ 81
Advances (Collections)-PPE			(6)
Reimbursements to third parties:			
Subsidies paid to fuel alcohol producers		5	235
Others			24
<b>Total reimbursements to third parties</b>		<b>5</b>	<b>259</b>
Reimbursements to Petrobras:			
Transport of oil products	1		(6)
Net result of fuel alcohol commercialization activities(1)			
<b>Total reimbursements to Petrobras</b>	<b>1</b>		<b>(6)</b>
<b>Total reimbursements</b>	<b>1</b>	<b>5</b>	<b>253</b>
Financial income	4	10	2



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Results of certification/audit process conducted by the Brazilian government(2)	16		(29)
Partial settlement	(3)		
Translation gain (loss)(3)	25	42	(119)
	<u>        </u>	<u>        </u>	<u>        </u>
<b>Ending balance</b>	<b>\$ 282</b>	<b>\$ 239</b>	<b>\$ 182</b>
	<b>—————</b>	<b>—————</b>	<b>—————</b>

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

(2) For 2002, U.S.\$29 million was recorded as a component of other expenses, net.

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

The U.S.\$43 million increase in the balance of the Petroleum and Alcohol Account during 2004 was primarily a result of the audit process conducted by the ANP and the 8.1% appreciation of the Real against the U.S. dollar.

### *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.

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With the effectiveness of the Oil Law and the regulations promulgated by the ANP thereunder, concessionaires are 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

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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), which issues operating or drilling licenses. Maintenance of the licenses requires the submission of reports, including safety and pollution monitoring reports (IOPP) to IBAMA. Onshore environmental, health and safety conditions are controlled at the state rather than federal level. 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.

CONAMA's Resolution No. 23 of 1994 requires us to conduct environmental studies in connection with certain of our activities. We must eliminate, mitigate, or compensate the relevant parties for, the adverse environmental effects identified through these studies.

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 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.

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.

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.

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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.

In 2004, we invested approximately U.S.\$490 million in environmental projects as compared to approximately U.S.\$750 million in 2003. These investments were primarily directed at reducing emissions and wastes resulting from industrial processes, managing water use and effluents, remediating impacted areas, obtaining oil collectors for our environmental protection centers and other new equipment to improve our response to emergency situations, implementing new environmental technologies, upgrading our pipelines and providing environmental compensation.

We are subject to a number of administrative proceedings and civil and criminal claims relating to environmental matters. See Item 8. Financial Information Legal Proceedings Environmental Claims.

## **Health, Safety and Environmental Initiatives**

### *Initiatives*

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, safety and environmental concerns and ensure compliance with environmental regulations, we have:

developed the PEGASO program to upgrade our pipelines and other equipment, implement new technologies, improve our emergency response readiness, reduce emissions and residues and prevent environmental accidents. From January 1, 2000 to December 31, 2004, we spent approximately U.S.\$3.0 billion under this program, including through the *Programa de Integridade de Dutos* (Pipeline Integrity Program) through which we conduct inspections of, and improvements to, our pipelines. In 2004, we spent approximately U.S.\$594 million in connection with the PEGASO 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 concerns related to health, safety and the environment, or HSE.

established our new HSE policy and corporate guidelines, which focus 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;

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built nine environmental protection centers and seven advanced bases for oil spill prevention, control and response, established local and regional onshore and offshore contingency plans to deal with oil spills and chartered three dedicated oil spill recovery vessels (OSRVs) fully equipped for oil spill control and fire fighting;

received HSE certificates for all our operating units. By December 2004, 57 operating units, 33 in Brazil and 24 abroad, 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). With the integration of our management

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processes, which is currently being implemented, we will obtain only one ISO 14001 and one OHSAS 18001 certificate for all our Brazilian refineries, fertilizer plants and two downstream corporate units. We expect to obtain such certificate in September 2005;

developed the Programa de Segurança de Processo (Process Safety Program) to implement standardized, company-wide guidelines of HSE, effectively investigate incidents and strengthen our institutional commitment to HSE through employee training. As part of this program, we have created a HSE Management Manual;

developed an Air Emissions Management System, in conjunction with an international consulting company, for our operations in Brazil and South America. The system gathers information about emissions of sulfur dioxide, nitrogen oxides, carbon monoxide, the main greenhouse gases (carbon dioxide, methane and nitrous oxide) and other chemicals, allowing us to improve the management of our emissions;

participated in negotiations conducted by the Brazilian Ministry of Mines and Energy of new regulations of environmental compensation related to the implementation of new projects;

participated with the Brazilian Ministry of Mines and Energy and IBAMA in a governmental body created to supervise the implementation of the new planned gas pipelines;

participated regularly in the discussion agenda of the Brazilian Ministry of Mines and Energy and the Ministry of the Environment about environmental issues affecting our business;

developed and implemented programs to promote the use of renewable energy. In 2004, our Strategic Plan allocated 0.5% of our total capital expenditures to investments in these programs, which included: (1) a pilot wind power plant with an installed capacity of 1.8MW in the State of Rio Grande do Norte; and (2) solar panels to heat water for dressing-rooms at the Gabriel Passos Refinery in Minas Gerais, among others.

In addition, we conduct environmental studies for all new projects as required by Brazilian environmental legislation, and our HSE department evaluates each and every project with a total budget exceeding U.S.\$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.

### *Management*

We have a HSE Management Committee, which was created by our executive officers to ensure that HSE issues are addressed throughout the company. The committee is composed of executive managers of our different business segments and of directors of our controlled companies. The work of the HSE Management Committee is supported by three permanent subcommittees, two temporary commissions and one temporary work group, each one responsible for a specific HSE issue, such as licensing and environmental compensation and risk assessment.

We have also created an Environmental Committee, which is composed of three members of our Board of Directors, including our Chairman and our Chief Executive Officer. The committee is responsible for, among other things: (1) overseeing and managing environmental and work safety issues affecting us; (2) establishing measurable environmental targets and ensuring compliance; and (3) recommending changes in



environmental, health and safety policy, if necessary, to our board of directors. The Environmental Committee charter is still subject to approval by our Board of Directors.

**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.

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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 explore, produce, transport and distribute oil products in Brazil. As a result, some participants have already begun importing refined oil products, which will compete with oil products from our Brazilian refineries, as well as the oil products we currently import. We 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 estimate that we had a market share of approximately 96.7% in the Brazilian oil production segment in 2004. We do not have meaningful competitors in the oil production segment in Brazil. In the oil exploration segment, we estimate that the exploration activities conducted solely by us represented approximately 39.3% of the Brazilian oil exploration market in 2004 and the exploration activities conducted by us in conjunction with other partners represented approximately 46.8% of the oil exploration market in Brazil in 2004. Our main competitors in the oil exploration segment are Agip, Devon, Shell, Maersk, Statoil, Chevron Texaco, Encana and El Paso.

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. We had a market share of approximately 32.8% in the Brazilian oil distribution segment according to Sindicom, a Brazilian industry association of oil and gas distribution companies. Our main competitors in this segment are Ipiranga, Shell, Esso, and Texaco.

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. We had a market share of approximately 7.7% in the Brazilian natural gas and power segment based on 2004 revenues, according to the Brazilian National Energetic Balance for 2004, or BEN 2004, published by the Ministry of Mines and Energy.

In our international segment, we are planning to continue expanding 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. We have already become a major player in some of the countries in which we have international operations. In Argentina, we estimate that we have a market share of 14.7% for auto fuel and 8.1% for lubricants. In Bolivia, we have a market share of 98% of the oil refining market, 25% of the fuel market, and 63% of lubricants.

## **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, our fleet 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 BBB+ or higher by Standard & Poor's rating agency or B++ or higher by A.M. Best. Substantially all of our international operations are insured or reinsured by our Bermudian subsidiary Bear Insurance Company Limited following exactly the same rating criteria.

Less valuable assets, such as small auxiliary boats, certain storage facilities, and some administrative installations, are self-insured. We do not maintain coverage for business interruption, except for a minority of our international operations. We also do not maintain coverage for our

wells for substantially all of our Brazilian operations.

Since November 2000, we maintain coverage for operational third-party liability with respect to our onshore and offshore activities, including environmental risks such as oil spills. The insurance policy covers any damage resulting from either our or our affiliates' activities, with the exception of our international activities, which have

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their own insurance and are therefore not included in this policy. In Brazil, our coverage in this policy is of up to U.S.\$250 million per accident in the aggregate (fines imposed by government authorities are not covered). In case of an accident, this coverage may not be sufficient to compensate us for losses incurred. Although we do not insure most of our pipelines, we have insurance against damage or loss resulting from specific incidents, as well as oil pollution from our pipelines.

We also maintain coverage for risks associated with transportation, hull and machinery risk. Since 1999, we have directors and officers insurance coverage. 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.

The premium for renewing our property risk insurance policy for a 12-month period commencing June 2004 was U.S.\$25.2 million. This represented a decrease of 21% over the preceding 12-month period. The decrease was primarily due to a change in the insurance market which became more competitive and a better perception of our risk by the market due to our risk management and HSE policies. In the same period, the insured value of our assets increased by 28%, from U.S.\$20.8 billion to U.S.\$26.6 billion. Since 2001, our risk retention has increased and our deductibles may reach U.S.\$20 million in certain cases.

Our facilities are regularly subject to risk surveys undertaken by international risk consultants. The reports and recommendations prepared in these surveys are made public, as well as the actions taken by us to meet these recommendations. All the significant accidents and their causes, as well as the improvements we make to our HSE standards are periodically released to the public.

## **ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

### **Management's Discussion and Analysis of Petrobras' Financial Condition and Results of Operations**

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.

#### **Overview**

We earn income from:

domestic sales, which mainly consists of sales of oil products (such as gasoline, diesel fuel, jet fuel, fuel oil, naphtha and liquefied petroleum gas), natural gas, petrochemical products and electricity;

export sales, which consist primarily of sales of crude oil and oil products;

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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 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.

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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 political and economic conditions;

fluctuations in the Real/U.S. dollar and Argentine Peso/U.S. dollar exchange rates; 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 2004 totaled approximately 989,719 million barrels of crude oil equivalent, representing U.S.\$37,452 million in net operating revenues, as compared to approximately 923,481 million barrels of crude oil equivalent, representing U.S.\$30,797 million in net operating revenues in 2003 and approximately 911,817 million barrels of crude oil equivalent and U.S.\$22,612 million in net operating revenues in 2002.

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.\$38.21 in 2004, U.S.\$28.84 per barrel for 2003 and U.S.\$25.02 per barrel for 2002. For December 2004, Brent crude oil prices averaged U.S.\$39.53 barrel, but during 2005 (through February), Brent crude oil prices have increased, averaging U.S.\$44.88 per barrel. This increase in average crude oil prices also affected international prices for oil products.

### *Domestic Sales Volumes and Prices*

During 2004, approximately 72.5% of our net operating revenues were derived from sales of crude oil and oil products in Brazil, as compared to 73.9% in 2003 and 76.0% in 2002. As export volumes of crude oil and oil products have increased, domestic sales as a percentage of net operating revenues have declined.



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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 each of 2004, 2003 and 2002:

	For the Year Ended December 31,								
	2004			2003			2002		
	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.\$)(1)	(U.S.\$ in millions)	(Mbbbl, except as otherwise noted)	(U.S.\$)(1)	(U.S.\$ in millions)	(Mbbbl, except as otherwise noted)	(U.S.\$)(1)	(U.S.\$ in millions)
<b>Energy products:</b>									
Automotive gasoline	100,712	\$ 41.59	\$ 4,188	94,364	\$ 38.28	\$ 3,612	97,642	\$ 26.94	\$ 2,630
Diesel	240,237	44.64	10,725	219,622	40.64	8,925	228,626	28.01	6,404
Fuel oil	39,654	28.45	1,128	43,475	27.92	1,214	48,069	20.12	967
Liquid petroleum gas	79,982	28.14	2,166	73,575	27.07	1,992	77,522	19.80	1,535
<b>Total energy products</b>	<b>457,584</b>		<b>18,207</b>	<b>431,036</b>		<b>15,743</b>	<b>451,859</b>		<b>11,536</b>
<b>Non-energy products:</b>									
Petrochemical naphtha	57,595	42.28	2,435	57,291	32.03	1,835	58,587	23.09	1,353
Others	77,652	41.96	3,258	73,901	33.69	2,490	90,686	24.87	2,255
<b>Total non-energy products</b>	<b>135,247</b>		<b>5,693</b>	<b>131,192</b>		<b>4,325</b>	<b>149,273</b>		<b>3,608</b>
Fuel alcohol	455	31.87	14	458	39.30	18	2,082	29.30	61
Natural gas (BOE)	77,310	18.61	1,439	64,517	18.94	1,222	56,876	12.92	735
<b>Sub-total</b>	<b>670,596</b>	<b>37.81</b>	<b>25,353</b>	<b>627,203</b>	<b>33.97</b>	<b>21,308</b>	<b>660,090</b>	<b>24.15</b>	<b>15,940</b>
Distribution net sales	182,327	57.36	10,458	158,635	50.39	7,994	170,609	38.35	6,543
Intercompany net sales	(164,730)	52.62	(8,668)	(143,339)	45.63	(6,541)	(158,041)	33.55	(5,302)
<b>Total domestic market</b>	<b>688,193</b>	<b>39.44</b>	<b>27,143</b>	<b>642,498</b>	<b>35.43</b>	<b>22,761</b>	<b>672,658</b>	<b>25.54</b>	<b>17,181</b>
Export net sales	186,221	31.80	5,923	192,545	27.71	5,335	202,003	22.82	4,610
International net sales	83,800	33.89	2,840	65,241	30.26	1,974	28,787	20.42	588
Others	31,504	39.18	1,234	23,197	28.84	669	8,370	19.71	165
<b>Sub-Total</b>	<b>301,256</b>	<b>33.15</b>	<b>9,997</b>	<b>280,983</b>	<b>28.39</b>	<b>7,978</b>	<b>239,159</b>	<b>22.43</b>	<b>5,363</b>
Services			312			57			68
<b>Consolidated net sales</b>	<b>989,719</b>		<b>37,452</b>	<b>923,481</b>		<b>\$ 30,797</b>	<b>911,817</b>		<b>\$ 22,612</b>

(1) Net average price calculated by dividing net sales price by the volume for the year.

During 2004, we announced three increases in gasoline and diesel prices due to the elevated prices of crude oil and oil products on the international market. The price increases in the charts below reflect the increases in billing at Petrobras refineries, without ICMS.



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Price increase announced on June 15, 2004:

	<b>Percentage Increase in Price</b>	
	(without CIDE and PIS/COFINS taxes)	(with CIDE and PIS/COFINS taxes)
Gasoline	10.8%	6.1%
Diesel	10.6%	8.2%

Price increase announced on October 15, 2004:

	<b>Percentage Increase in Price</b>	
	(without CIDE and PIS/COFINS taxes)	(with CIDE and PIS/COFINS taxes)
Gasoline	4.0%	2.4%
Diesel	6.0%	4.8%

Price increase announced on November 26, 2004:

	<b>Percentage Increase in Price</b>	
	(without CIDE and PIS/COFINS taxes)	(with CIDE and PIS/COFINS taxes)
Gasoline	7.0%	4.2%
Diesel	10.0%	8.0%

### *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 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. Our export volumes of crude oil and oil products totaled 186,221 million barrels of crude oil equivalent in 2004, as compared to

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192,545 million barrels of crude oil equivalent in 2003 and 202,003 million barrels of crude oil equivalent in 2002. 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 an increase in average prices for export sales of crude oil and oil products, partially offset by a decrease in the volume of exports, the total value of our crude oil and oil product exports (measured on a free-on-board basis) in 2004 was U.S. \$5,923 million, as compared to U.S.\$5,335 million in 2003 and U.S.\$4,610 million in 2002, representing approximately 15.8% of our net operating revenues in 2004, as compared to 17.3% in 2003 and 19.9% in 2002. 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.\$2,840 million in 2004, U.S.\$1,974 million in 2003 and U.S.\$588 million in 2002, representing approximately 7.6% of our net operating revenues in 2004, as compared to 6.4% in 2003 and 2.6% in 2002. 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*

We continue to import lighter crude oil for blending in our own refineries, as well as smaller quantities of diesel, liquefied petroleum gas, naphtha and other oil products, to attend the demand of the Brazilian retail market. We have continuously upgraded our refineries to handle heavier crude oil in order to reduce our purchases of imported crude oil and oil products by refining a greater portion of our heavier crude oil production. 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. However, in 2004 the margin between our net operating revenues and cost of goods sold was lower than in 2003 as a result of an increase of imported crude oil to 155 million barrels in 2004 from 116 million barrels in 2003. This increase was mainly due to the growth of demand of oil products in Brazil that could not be met by our own crude oil production, which decreased in 2004 as compared to 2003. As we further upgrade our refineries to handle larger quantities of our heavy crude oil, our level of imports will tend to decrease. Our imports of crude oil had decreased to 116.1 million barrels in 2003, as compared to 117.6 million barrels of crude oil in 2002.

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 import oil products and supply the market, we continue to reevaluate our strategy in order to achieve an optimal level of imports for our profitability. We imported a total of 40.1 million barrels of oil products in 2004, as compared to 44.5 million barrels of oil products in 2003 and 78.5 million barrels in 2002. See Item 4. Information on the Company Refining, Transportation and Marketing-Imports.

## **Effect of Taxes on our Income**

### *General*

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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.

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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 2004, the tax was charged on 17 of our fields, including Marlim, Albacora, Roncador, Leste do Urucu, Rio Urucu, Canto do Amaro, Marimbá, Marlim Sul, Namorado, Carapeba, Pampo, Bicudo, Espadarte, Fazenda Alegre, Miranga, Carmópolis e Bijupirá. 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. The Special Participation Tax uses as a reference international oil prices converted to Reais at the current exchange rate.

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 4 to our audited consolidated financial statements.

### *Potential Change in ICMS Legislation*

In June 2003, the State of Rio de Janeiro enacted a law (State Law n° 4.117, dated June, 27th, 2003, also known as Noel Law ) imposing the Imposto sobre Circulação de Mercadorias e Serviços (state sales tax, or ICMS) on upstream activities. The law was regulated by Decree n° 34.761, which was suspended by Decree n° 34.783 of February 4th, 2004, for an undetermined period of time. Nevertheless, the State of Rio de Janeiro may choose to enforce the law at any time.

The constitutionality of this law is currently being challenged at the Brazilian Supreme Court (Supremo Tribunal Federal - STF). The claim was filed by the Federal Prosecutor and the Attorney General has given a favorable legal opinion. The Supreme Court did not suspend the effectiveness of the law.

In accordance with legislation currently in force, the ICMS for fuels derived from oil is assessed at the point of sale but not at the wellhead level. As a result, the tax is mainly collected in the states where the sales of fuels are made. If the State of Rio de Janeiro enforces the new law, it is unlikely that the other states would allow us to use the tax imposed at the wellhead level in Rio de Janeiro as a credit to offset the tax imposed at the sale level. Therefore, we would have to pay ICMS at both levels, unless we were successful in challenging this tax in court. If the supreme court decides that this law is constitutional, our ability to challenge the payment of ICMS at both levels will depend on the ground of the Supreme Court's decision.

We estimate the amount of ICMS that we would be required to pay to the State of Rio de Janeiro could increase by approximately R\$5.85 billion (U.S.\$2.0 billion) per year as a result of this change in legislation. This increase could have a material adverse effect on our results of operations and financial condition.

## **Financial Income and Expense**

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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.\$911 million in 2004, U.S.\$602 million in 2003 and U.S.\$1,142 million in 2002.

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.\$1,733 million in 2004, U.S.\$1,247 million in 2003 and U.S.\$774 million in 2002. In addition, we capitalized U.S.\$267 million in interest in 2004, as compared to U.S.\$184 million in 2003 and U.S.\$139 million in 2002.

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### **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 increased markedly in 2002. Inflation was 12.1% in 2004, 7.7% in 2003 and 26.4% in 2002, 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. These increases are counteracted by the adjustments that we make to our prices to offset the effects of inflation and an appreciation of the U.S. dollar against the Real.

#### *Exchange Rate Variation*

Since we adopted the Real as our functional currency in 1998, fluctuations in the value of the Real against the U.S. dollar, particularly devaluations of the Real, have 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 2004, there was a 8.1% appreciation of the Real against the U.S. dollars, as compared to a 18.2% appreciation in 2003 and a 52.3% devaluation in 2002.

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 and have generally been able to maintain parity with international prices. 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.

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. Prior to 2003, our Reais-denominated costs increased at a rate slower than the devaluation. Accordingly, the effect was to decrease costs of locally supplied products and services when reported in U.S. dollars.

In recent periods, the exchange rate variation has had the following additional effects, among others, on our financial condition and results of operations:

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We record the remeasurement effects of our non-Reais denominated assets and liabilities held in Brazil (e.g., cash, cash equivalents and financial obligations) in our statements of income. Primarily because of our substantial liabilities denominated in foreign currency, we recorded a U.S.\$368 million net foreign exchange gain in our 2004 statement of income, compared to a U.S.\$2,433 million net foreign exchange gain in 2003 and a U.S.\$2,156 million net foreign exchange loss in 2002. 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 gain 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 (appreciation) of the Real against the U.S. dollar will be reflected as a reduction (gain) in the U.S. dollar

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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.\$1,911 million credit directly to shareholders' equity in our statement of changes in shareholders' equity for 2004, without affecting net income, to reflect the appreciation of the Real against the U.S. dollar of approximately 8.1%, as compared to a credit of U.S.\$2,856 million in 2003 to reflect the appreciation of 18.2% and a charge of U.S.\$5,452 million in 2002 to reflect the devaluation of 52.3%.

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 Reais, 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 exchange rate variation 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, the exchange rate variation 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 of our unretained earnings available for distribution.

**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, oil products and natural gas 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>2004</u>	<u>2003</u>	<u>2002</u>
<b>Crude Oil and NGL Production (Mbpd)</b>			
Brazil	1,493	1,540	1,500
International	168	161	35
Total Crude Oil and NGL Production	1,661	1,701	1,535
Change in Crude Oil and NGL Production	(2.4)%	10.8%	11.3%
<b>Average Sales Price for Crude (bpd in U.S.\$)</b>			
Brazil	\$ 33.49	\$ 27.01	\$ 22.30
International	\$ 26.51	\$ 23.77	\$ 23.00
<b>Natural Gas Production (Mmcfd)</b>			
Brazil	1,590	1,500	1,512
International	564	510	138
Total Natural Gas Production	2,154	2,010	1,650
Change in Natural Gas Production (sold only)	7.2%	21.8%	7.0%
<b>Average Sales Price for Natural Gas (Mcf in U.S.\$)</b>			
Brazil	1.93	1.79	1.22
International	1.17	1.26	1.34
Year End Exchange Rate	2.65	2.89	3.53
Appreciation (Devaluation) during the year	8.1%	18.2%	(52.3)%



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Inflation Rate (IGP-DI)	12.1%	7.7%	26.4%
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*Results of Operations for the year ended December 31, 2004 ( 2004 ) compared to the year ended December 31, 2003 ( 2003 ).*

The comparison between our results of operations for 2004 and 2003 has been affected by the 4.8% decrease in the average Real/U.S. dollar exchange rate for 2004 as compared to the average Real/U.S. dollar exchange rate for 2003. For ease, we refer to this change in the average exchange rate as the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

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### *Revenues*

Net operating revenues increased 21.6% to U.S.\$37,452 million for 2004, as compared to U.S.\$30,797 million for 2003. This increase was primarily attributable to an increase in prices of our products, both in the domestic market and outside Brazil, an increase in sales volume in the domestic market, and the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

Consolidated sales of products and services increased 21.7% to U.S.\$51,954 million for 2004, as compared to U.S.\$42,690 million for 2003, primarily due to the increases mentioned immediately above.

Included in sales of products and services are the following amounts that 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 increased 23.2% to U.S.\$11,882 million for 2004, as compared to U.S.\$9,644 million for 2003, primarily due to the increase in prices and sales volume of our products and services; and

CIDE, the per-transaction tax due to the Brazilian government, which increased 16.5% to U.S.\$2,620 million for 2004, as compared to U.S.\$2,249 million for 2003. This increase was primarily attributable to the increase in sales volume of our products and services and to the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

### *Cost of sales*

Cost of sales for 2004 increased 31.7% to U.S.\$20,303 million, as compared to U.S.\$15,416 million for 2003. This increase was principally a result of:

a U.S.\$2,037 million increase in the cost of imports due to higher prices and a greater volume of imports;

a U.S.\$775 million increase in costs associated with a 6.6% increase in our domestic sales volumes;

a U.S.\$644 million increase in costs of certain thermoelectric plants, whose financial statements we have been consolidating line by line since January 1, 2004, as a result of the adoption of FIN 46;

a U.S.\$556 million increase in costs associated with our international trading activities, due to increases in volume and prices from offshore operations, conducted by PIFCo;

a U.S.\$495 million increase in taxes and charges imposed by the Brazilian government totaling U.S.\$3,576 million for 2004, as compared to U.S.\$3,081 million for 2003, including an increase in the special participation charge (an extraordinary charge payable in the event of high production and/or profitability from our fields) to U.S.\$1,883 million for 2004, as compared to U.S.\$1,625

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million for 2003, as a result of higher international oil prices;

a U.S.\$354 million increase in costs associated with the full consolidation of PEPSA and PELSA; and

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

### *Depreciation, depletion and amortization*

We calculate depreciation, depletion and amortization of exploration and production assets on the basis of the units of production method. Depreciation, depletion and amortization expenses increased 39.0% to U.S.\$2,481 million for 2004, as compared to U.S.\$1,785 million for 2003. This increase was primarily attributable to the following:

an increase of approximately U.S.\$331 million resulting from higher depreciation principally associated with the Dourado, Roncador, Marlim Sul and Jubarte Fields as a result of increased property, plant and equipment (PP&E) expenditures;

an increase of approximately U.S.\$156 million resulting from the full consolidation of PEPSA and PELSA; and

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

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### *Exploration, including exploratory dry holes*

Exploration costs, including exploratory dry holes increased 19.7% to U.S.\$613 million for 2004, as compared to U.S.\$512 million for 2003. This increase was primarily attributable to the following:

an increase of U.S.\$165 million in dry holes expenses, including U.S.\$72 million associated with the write-off of signature bonuses in Angola;

an increase of U.S.\$56 million in geological and geophysical expenses;

an increase of approximately U.S.\$29 million resulting from the full consolidation of PEPSA and PELSA; and

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

These increases were partially offset by a decrease of U.S.\$196 million due to a revision in the estimated expenses for dismantling oil and gas producing areas and future well abandonment.

### *Impairment of oil and gas properties*

For 2004, we recorded an impairment charge of U.S.\$65 million, as compared to an impairment charge of U.S.\$70 million for 2003. The impairment charge in 2004 related to capital expenditures for Brazilian fields in production, but with only marginal reserves. We also recorded an impairment charge of U.S.\$13 million due to goodwill assessment. In 2003, the impairment charge was related to certain of our oil and gas producing properties in Brazil, Colombia and Angola. These charges were recorded based upon our annual assessment of these fields using prices consistent with those used in our overall strategic plan and discounted at a rate of 10%, a rate consistent with the rate used for internal project valuations.

### *Selling, general and administrative expenses*

Selling, general and administrative expenses increased 38.7 % to U.S.\$2,901 million for 2004, as compared to U.S.\$2,091 million for 2003.

Selling expenses increased 51.4% to U.S.\$1,544 million for 2004, as compared to U.S.\$1,020 million for 2003. This increase was primarily attributable to the following:

an increase of U.S.\$368 million in expenses mainly associated with the transportation costs of oil products. A portion of these expenses were previously classified as cost of sales in 2003;

an increase of approximately U.S.\$33 million in selling expenses resulting from the full consolidation of PEPSA and PELSA;

an increase of approximately U.S.\$33 million in selling expenses resulting from the charge for doubtful accounts; and

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

General and administrative expenses increased 26.7% to U.S.\$1,357 million for 2004, as compared to U.S.\$1,071 million for 2003. This increase was primarily attributable to the following:

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003;

an increase of approximately U.S.\$110 million in expenses related to technical consulting services in connection with our increased outsourcing of selected non-core general activities;

an increase of approximately U.S.\$45 million resulting from the full consolidation of PEPSA and PELSA; and

an increase of approximately U.S.\$72 million in employee expenses due to the increase in our workforce and salaries; and an increase in the actuarial calculations relating to future health care and pension benefits.

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*Research and development expenses*

Research and development expenses increased 23.4% to U.S.\$248 million for 2004, as compared to U.S.\$201 million for 2003. This increase was primarily related to additional investments in programs for environmental safety, deepwater and refining technologies of approximately U.S.\$36 million and to the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

*Other operating expenses*

Other operating expenses decreased 20.6% to an expense of U.S.\$259 million for 2004, as compared to an expense of U.S.\$326 million for 2003.

The charges for 2004 were:

a U.S.\$110 million expense for idle capacity from thermoelectric power plants;

a U.S.\$85 million expense for unscheduled stoppages of plant and equipment; and

a U.S.\$64 million increase in contractual losses from compliance with our ship or pay commitments with respect to our investments in the OCP pipeline in Ecuador.

The charges for 2003 were:

a U.S.\$173 million expense for unscheduled stoppages of plant and equipment;

a U.S.\$97 million provision for expected losses on the sale of property, plant and equipment related to offshore production; and

a U.S.\$56 million increase in losses associated with our ship or pay commitments related to the OCP pipeline in Ecuador.

*Equity in results of non-consolidated companies*

Equity in results of non-consolidated companies increased 22.0% to a gain of U.S.\$172 million for 2004, as compared to a gain of U.S.\$141 million for 2003, due primarily to a U.S.\$21 million gain as a result of the consolidation of PEPSA and PELSA and their equity method investees for the full year in 2004, as opposed to approximately seven months in 2003.

*Financial income*

We derive financial income from several sources, including interest on cash and cash equivalents. The majority of our cash equivalents are short-term Brazilian government securities, including securities indexed to the U.S. dollar. We also hold U.S. dollar deposits.

Financial income increased 51.3% to U.S.\$911 million for 2004 as compared to U.S.\$602 million for 2003. This increase was primarily attributable to fair value adjustments on gas hedge transactions, which was partially offset by a decrease in financial interest income from short-term investments due to higher investments in securities indexed to the U.S. dollar in 2004 when compared to 2003, resulting in lower income due to the effect of the 8.1% appreciation of the Real against the U.S. dollar during 2004, as compared to the 18.2% appreciation of the Real against the U.S. dollar during 2003. A breakdown of financial income and expenses is shown in Note 14 to our audited consolidated financial statements for the year ended December 31, 2004.

*Financial expense*

Financial expense increased 39.0% to U.S.\$1,733 million for 2004, as compared to U.S.\$1,247 million for 2003. This increase was primarily attributable to an increase of approximately U.S.\$233 million in financial expenses resulting from PEPSA's hedge operations; as well as a loss of U.S.\$137 million on repurchases of our own securities.

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

Monetary and exchange variation on monetary assets and liabilities, net generated a gain of U.S.\$450 million for 2004, as compared to a gain of U.S.\$509 million for 2003. The decrease in monetary and exchange variation on monetary assets and liabilities, net is primarily attributable to the effect of the 8.1% appreciation of the Real against the U.S. dollar during 2004, as compared to the 18.2% appreciation of the Real against the U.S. dollar during 2003.

### *Employee benefit expense*

Employee benefit expense consists of financial costs associated with expected pension and health care costs. Our employee benefit expense increased 9.2% to U.S.\$650 million for 2004, as compared to U.S.\$595 million for 2003. This increase in costs was primarily attributable to an increase of U.S.\$25 million from the annual actuarial calculation of our pension and health care plan liability and to the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

### *Other taxes*

Other taxes, consisting of miscellaneous value-added, transaction and sales taxes, increased 32.1% to U.S.\$440 million for 2004, as compared to U.S.\$333 million for 2003. This increase was primarily attributable to the following:

an increase of U.S.\$37 million in the CPMF, a tax payable in connection with certain financial transactions;

an increase of U.S.\$22 million in taxes related to our international activities;

an increase of U.S.\$18 million in the PASEP/COFINS taxes on financial income, due to an increase in the COFINS tax rate from 3.0% to 7.6% beginning February 1, 2004; and

the 4.8% increase in the value of the Real against the U.S. dollar in 2004, as compared to 2003.

### *Other expenses, net*

Other expenses, net are primarily composed of gains and losses recorded on sales of fixed assets, general advertising and marketing expenses and certain other non-recurring charges. Other expenses, net decreased to an expense of U.S.\$357 million for 2004, as compared to an expense of U.S.\$700 million for 2003.

The most significant charges for 2004 were:



a U.S.\$262 million expense for institutional relations and cultural projects;

a U.S.\$87 million expense for legal liability and contingencies related to pending lawsuits; and

a U.S.\$46 million provision for tax assessments received from the Instituto Nacional de Seguridade Social (National Social Security Institute, or INSS). See Item 8. Financial Information Legal Proceedings and Note 21 to our audited consolidated financial statements for the year ended December 31, 2004.

The most significant charges for 2003 were:

a U.S.\$198 million expense for institutional relations and cultural projects;

a U.S.\$183 million loss related to our investments in certain thermoelectric power plants resulting from our contractual obligations to cover losses when decreased demand for power and electricity resulted in lower prices;

a U.S.\$130 million expense for legal liability and contingencies related to pending lawsuits. See Note 21 to our audited consolidated financial statements for the year ended December 31, 2004;

a U.S.\$114 million expense for a lower of cost or market adjustment with respect to turbines we expected to use in connection with our thermoelectric projects, but which we did not use for such projects; and

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a U.S.\$55 million provision for tax assessments received from the INSS.

### *Income tax (expense) benefit*

Income before income taxes, minority interest and accounting changes increased 1.8% to U.S.\$8,935 million for 2004, as compared to U.S.\$8,773 million for 2003. The income tax expense decreased 16.2% to U.S.\$2,231 million for 2004, as compared to an expense of U.S.\$2,663 million for 2003, primarily due to the additional tax benefits related to interest on shareholders' equity that amounted to U.S.\$650 million for 2004, as compared to U.S.\$364 million for 2003.

The reconciliation between the tax calculated based upon statutory tax rates to income tax expense and effective rates is shown in Note 4 to our audited consolidated financial statements for the year ended December 31, 2004.

### *Cumulative effect of change in accounting principle*

As of January 1, 2003, we generated a gain of U.S.\$697 million (net of U.S.\$359 million of taxes) resulting from the adoption of SFAS No. 143 Accounting for Asset Retirement Obligations. The adjustment was due to the difference in the method of accruing end of life asset retirement obligations under SFAS 143, as compared with the method required by SFAS 19 Financial Accounting and Reporting by Oil and Gas Producing Companies.

### *Increase of authorized capital*

The General Extraordinary Shareholders Meeting, held in conjunction with the General Ordinary Meeting on March 29, 2004, approved an increase in authorized capital from R\$30 billion (U.S.\$10.4 billion) to R\$60 billion (U.S.\$20.8 billion).

### *Natural gas derivative contract*

In connection with a long-term contract to buy gas (Gas Supply Agreement or the GSA) to supply thermoelectric plants and for other uses in Brazil, we entered into a contract, effective October 2002, with a gas producer that constituted a derivative financial instrument under SFAS 133. This contract, the Natural Gas Price Volatility Reduction Contract (or PVRC), matures in 2019 and was executed with the purpose to reduce the volatility of price respective to the GSA.

At inception, the PVRC had a positive value to us of U.S.\$169 million, which is deemed a deferred purchase incentive and is being amortized into income on the basis of the volumes anticipated under the PVRC. The liability was U.S.\$153 million at December 31, 2004 and generated a gain in the amount of U.S.\$11 million, net of deferred tax effect of U.S.\$5 million.

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The PVRC is being accounted for under SFAS 133 as a derivative instrument, since the Company did not satisfy the documentation required for hedge accounting, and is being marked to its calculated fair value with changes in such value recognized in income. As of December 31, 2004, we recorded a derivative asset based on the fair value calculation in the amount of U.S.\$635 million, and a mark-to-market gain in the amount of U.S.\$365 million, net of deferred tax effect of US\$188 million.

See Note 23 to our audited consolidated financial statements for the year ended December 31, 2004.

*Results of Operations for the year ended December 31, 2003 ( 2003 ) compared to the year ended December 31, 2002 ( 2002 ).*

The comparison between our results of operations has been impacted by the Real's appreciation against the U.S. dollar, due to the fact that the average Real/U.S. dollar exchange rate for 2003 was 5.2% lower than the average exchange rate for 2002.

### *Revenues*

Net operating revenues increased 36.2% to U.S.\$30,797 million for 2003, as compared to net operating revenues of U.S.\$22,612 million for 2002. This increase was primarily attributable to the alignment of prices of certain oil products in the Brazilian market with international prices of such products at the end of 2002. The

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increase in net operating revenues was also attributable, to a lesser extent, to an increase in sales volume outside Brazil (international sales), which includes sales conducted by PEPSA and PELSA. This increase was partially offset by a 4.4% reduction in sales volume in the domestic market, primarily due to a decrease in Brazilian consumer demand. See Sales Volumes and Prices Domestic Sales Volumes and Prices.

Our consolidated sales of products and services increased 29.4% to U.S.\$42,690 million for 2003, as compared to U.S.\$32,987 million for 2002.

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 increased 24.6% to U.S.\$9,644 million for 2003, as compared to U.S.\$7,739 million for 2002, primarily due to the increase in sales of products and services; and

CIDE, an excise tax payable to the Brazilian government, which decreased 14.7% to U.S.\$2,249 million in 2003, as compared to U.S.\$2,636 million in 2002. This decrease was primarily attributable to the effect of the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

*Cost of sales*

Cost of sales for 2003 increased 34.0% to U.S.\$15,416 million, as compared to U.S.\$11,506 million for 2002. This increase was principally a result of:

an increase in taxes and charges imposed by the Brazilian government, which amounted to U.S.\$3,081 million in 2003 as compared to U.S.\$2,014 million in 2002. These taxes and charges included the special participation charge (an additional charge payable in the event of high production and/or profitability from our fields), which increased to U.S.\$1,625 million in 2003, as compared to U.S.\$917 million in 2002, as a result of our increased production of crude oil during 2003, the inclusion of the Canto do Amaro and Roncador fields as fields subject to the special participation tax and the increase in domestic reference prices for domestic crude oil;

a net increase in cost of sales outside Brazil, excluding PEPSA and PELSA, of approximately U.S.\$800 million, attributable to an increase in our sales volume, lifting costs and prices in the international markets;

a net increase of U.S.\$634 million attributable to increased consumption of materials and maintenance services at ocean terminals, higher expenses associated with oil transport lines, including equipment and installation that provide operational support for these activities, and salaries, benefits and charges incurred in connection with salary readjustments for our larger workforce;

a U.S.\$561 million increase in the cost of imports primarily attributable to the increase of crude oil and oil product prices in the international markets; and

a U.S.\$431 million increase in costs associated with the consolidation of PEPSA and PELSA.

These increases were partially offset by:

a decrease of approximately U.S.\$379 million in cost of sales related to the 4.4% reduction in our domestic sales volumes; and

a decrease of U.S.\$39 million in costs of sales as expressed in U.S. dollars caused by the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

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### *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 decreased 7.5% to U.S.\$1,785 million for 2003, as compared to U.S.\$1,930 million for 2002. This decrease was primarily attributable to the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002, and to the effect of the adoption of SFAS 143 in 2003. In 2002, U.S.\$281 million in abandonment costs were recognized as depreciation, depletion and amortization in accordance with SFAS 19. In 2003, as a result of the adoption of SFAS 143, depreciation on the asset retirement obligation was recorded under depreciation, depletion and amortization, while accretion expense was recorded under exploration, including exploratory dry holes. See *Impact of New Accounting Standards SFAS 143*. This change resulted in U.S.\$21 million in abandonment costs being recognized as depreciation, depletion and amortization in 2003. The decrease in depreciation, depletion and amortization, was partially offset by an increase of depreciation, depletion and amortization expenses of approximately U.S.\$182 million incurred in connection with the activities of PEPSA and PELS.A.

### *Exploration, including exploratory dry holes*

Exploration costs, including exploratory dry holes increased 17.7% to U.S.\$512 million for 2003 as compared to U.S.\$435 million for 2002. This increase was primarily attributable to the increase of approximately U.S.\$49 million in exploration costs, including exploratory dry holes in connection with the consolidation of PEPSA and PELS.A and U.S.\$43 million in abandonment costs recognized. The increase in exploration costs, including exploratory dry holes, was partially offset by the effect of the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

### *Impairment of oil and gas properties*

For 2003, we recorded an impairment charge of U.S.\$70 million, as compared to an impairment charge of U.S.\$75 million for 2002. In 2003, the impairment charge was related to certain of our oil and gas producing properties in Brazil, Colombia and Angola. In 2002, the impairment charge was related to certain of our oil and gas producing properties in Brazil and Angola. 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 13%.

### *Selling, general and administrative expenses*

Selling, general and administrative expenses increased 20.1% to U.S.\$2,091 million for 2003, as compared to U.S.\$1,741 million for 2002.

Selling expenses increased 5.6% to U.S.\$1,020 million for 2003, as compared to U.S.\$966 million for 2002. This increase was primarily attributable to the consolidation of PEPSA and PELS.A, which resulted in a U.S.\$37 million increase in our 2003 selling expenses.

General and administrative expenses increased 38.2% to U.S.\$1,071 million for 2003, as compared to U.S.\$775 million for 2002. This increase was primarily attributable to an increase of U.S.\$65 million in expenses related to technical consulting services from our increased outsourcing of selected non-core general and administrative activities, an increase of U.S.\$41 million in expenses

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related to our profit sharing program, an increase of U.S.\$43 million in expenses related to employee training, an increase of U.S.\$57 million in general and administrative expenses recognized in connection with the consolidation of PEPSA and PELSA and an increase of U.S.\$40 million in connection with our interests in three thermoelectric power plants, which were consolidated in accordance with FIN 46. This increase in general and administrative expenses was partially offset by the effect of the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

### *Research and development expenses*

Research and development expenses increased 36.7% to U.S.\$201 million for 2003, as compared to U.S.\$147 million for 2002. This increase was primarily related to our additional investments in programs for environmental

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safety, deepwater and refining technologies of approximately U.S.\$62 million, and was partially offset by the effect of the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

*Other operating Expenses*

For 2003 we recognized losses amounting to U.S.\$326 million under other operating expenses which were composed of:

a U.S.\$173 million expense for unscheduled stoppages of plant and equipment;

a U.S.\$97 million provision for expected losses on the sale of property, plant and equipment related to off-shore production; and

a U.S.\$56 million increase in losses associated with our ship-or-pay commitment related to the OCP pipeline in Ecuador.

*Equity in results of non-consolidated companies*

Equity in results of non-consolidated companies registered a gain of U.S.\$141 million for 2003, as compared to a loss of U.S.\$178 million for 2002. This increase was primarily attributable to:

a gain of U.S.\$62 million for 2003 from our investments in natural gas distribution and petrochemical companies, as compared to a gain of U.S.\$14 million for 2002;

a gain of U.S.\$59 million for 2003, as compared to a loss of U.S.\$95 million for 2002, from our equity investments in Compañía Mega, an Argentine company that is engaged in natural gas activities, and which was adversely affected by the devaluation of the Argentine Peso against the U.S. dollar in 2002; and

a gain of U.S.\$21 million for 2003, as compared to a loss of U.S.\$94 million for 2002, from our investments in thermoelectric power plants. The equity results for 2003 do not include our interests in three thermoelectric power plants that were consolidated in accordance with FIN 46.

*Financial income*

We derive financial income from several sources, including:

interest on cash and cash equivalents. The majority of our cash equivalents are short-term Brazilian government securities, including securities indexed to the U.S. dollar. We also hold balances in U.S. dollar deposits;



long-term Brazilian government securities we acquired in connection with the privatization of our petrochemical assets; and

Government receivables, primarily the Petroleum and Alcohol Account.

Financial income decreased 47.3% to U.S.\$602 million for 2003, as compared to U.S.\$1,142 million for 2002. This decrease was primarily attributable to a reduction in financial interest income from short-term investments, which declined 79.4% to U.S.\$163 million for 2003, as compared to U.S.\$793 million for 2002. The reduction in financial income was also attributable to the 5.2% decrease in the value of the Real against the U.S. dollar for 2003, as compared to 2002. This decrease was partially offset by an increase of financial income of approximately U.S.\$80 million resulting from the consolidation of PEPSA and PELSA in our 2003 financial results.

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### *Financial expense*

Financial expense increased 61.1% to U.S.\$1,247 million for 2003, as compared to U.S.\$774 million for 2002. This increase was primarily attributable to our additional debt and an increase of approximately U.S.\$194 million in financial expenses resulting from the consolidation of PEPSA and PELSA in our 2003 financial results.

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

Monetary and exchange variation on monetary assets and liabilities, net registered a gain of U.S.\$509 million for 2003, as compared to a loss of U.S.\$2,068 million for 2002. Approximately 90% of our long-term indebtedness was denominated in foreign currencies during each of 2003 and 2002. The fluctuation in monetary and exchange variation on monetary assets and liabilities, net was primarily attributable to the effect of the 18.2% appreciation of the Real against the U.S. dollar during 2003, as compared to a 52.3% depreciation of the Real against the U.S. dollar during 2002.

### *Employee benefits expense*

Employee benefit expense consists of financial costs associated with pension and health care budgets. Our employee benefit expense increased 31.9% to U.S.\$595 million for 2003, as compared to U.S.\$451 million for 2002. This rise in costs was attributable to an increase of U.S.\$166 million from the annual actuarial calculation of our pension and health care plan liability. The increase was partially offset by the effect of the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002.

### *Other taxes*

Other taxes, consisting of miscellaneous value-added, transaction and sales taxes, decreased 7.5% to U.S.\$333 million for 2003, as compared to U.S.\$360 million for 2002. This decrease was primarily attributable to the 5.2% decrease in the value of the Real against the U.S. dollar in 2003, as compared to 2002, and the decrease of U.S.\$61 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.

### *Other expenses, net*

Other expenses, net are primarily composed of gains and losses recorded on sales of fixed assets, general advertising and marketing expenses and certain nonrecurring charges. Other expenses, net for 2003 decreased to an expense of U.S.\$700 million, as compared to an expense of U.S.\$857 million for 2002. The most significant charges were:

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a U.S.\$183 million losses related to our investments in certain thermoelectric power plants resulting from our contractual obligations with certain power plants to cover losses when decreased demand for power and electricity lead to lower prices;

a U.S.\$198 million expense for general advertising and marketing expenses unrelated to direct revenues;

a U.S.\$130 million expense for legal liability and contingencies related to pending lawsuits. Please see Note 21 to our consolidated financial statements;

a U.S.\$114 million expense for a lower of cost or market adjustment with respect to turbines we originally expected to use in connection with our thermoelectric projects, but which we no longer intend to use for such projects; and

a U.S.\$55 million provision for tax assessments received from the INSS.

The most significant charges for 2002 were:

a U.S.\$459 million provision for losses related to our investments in certain thermoelectric power plants;

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

a U.S.\$105 million provision for notifications of tax assessments received from the INSS;

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

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

*Income tax (expense) benefit*

Income before income taxes, minority interest and accounting changes increased from U.S.\$8,773 million for 2003 to U.S.\$3,232 million for 2002. As a result, we recorded an income tax expense of U.S.\$2,663 million for 2003, as compared to an expense of U.S.\$1,153 million for 2002.

The reconciliation between the tax calculated based upon statutory tax rates to income tax expense and effective rates is discussed in Note 4 to our consolidated financial statements as of December 31, 2003.

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**Business Segments**

Set forth below is selected financial data by segment for 2004, 2003 and 2002:

**SELECTED FINANCIAL DATA BY SEGMENT**