

PETROBRAS - PETROLEO BRASILEIRO SA  
Form 20-F  
April 28, 2016

**As filed with the Securities and Exchange Commission on April 27, 2016**

**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, 2015**

**Commission File Number 001-15106**

**Petróleo Brasileiro S.A.—Petrobras**

**(Exact name of registrant as specified in its charter)**

**Brazilian Petroleum Corporation—Petrobras**

**(Translation of registrant's name into English)**

**The Federative Republic of Brazil**

**(Jurisdiction of incorporation or organization)**

---

**Avenida República do Chile, 65**

**20031-912 - Rio de Janeiro - RJ Brazil**

**(Address of principal executive offices)**

**Ivan de Souza Monteiro**

**Chief Financial Officer and Chief Investor Relations Officer**

**(55 21) 3224-2401 - ivanmonteiro@petrobras.com.br  
Avenida República do Chile, 65 - 23<sup>d</sup> Floor  
20031-912 - Rio de Janeiro - RJ Brazil**

**(Name, telephone, e-mail and/or facsimile number and address of company contact person)**

---

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

Title of each class:	Name of each exchange on which registered:
Petrobras Common Shares, without par value* Petrobras American Depositary Shares, or ADSs	New York Stock Exchange*
(evidenced by American Depositary Receipts, or ADRs), each representing two Common Shares Petrobras Preferred Shares, without par value* Petrobras American Depositary Shares	New York Stock Exchange New York Stock Exchange*
(as evidenced by American Depositary Receipts), each representing two Preferred Shares	New York Stock Exchange
6.125% Global Notes due 2016, issued by PGF (successor to PifCo)	New York Stock Exchange
3.500% Global Notes due 2017, issued by PGF (successor to PifCo)	New York Stock Exchange
5.875% Global Notes due 2018, issued by PGF (successor to PifCo)	New York Stock Exchange
7.875% Global Notes due 2019, issued by PGF (successor to PifCo)	New York Stock Exchange
5.750% Global Notes due 2020, issued by PGF (successor to PifCo)	New York Stock Exchange
5.375% Global Notes due 2021, issued by PGF (successor to PifCo)	New York Stock Exchange
6.875% Global Notes due 2040, issued by PGF (successor to PifCo)	New York Stock Exchange
6.750% Global Notes due 2041, issued by PGF (successor to PifCo)	New York Stock Exchange
2.000% Global Notes due 2016, issued by PGF	New York Stock Exchange
3.000% Global Notes due 2019, issued by PGF	New York Stock Exchange
4.375% Global Notes due 2023, issued by PGF	New York Stock Exchange
5.625% Global Notes due 2043, issued by PGF	New York Stock Exchange
Floating Rate Global Notes due 2016, issued by PGF	New York Stock Exchange
Floating Rate Global Notes due 2019, issued by PGF	New York Stock Exchange
3.250% Global Notes due 2017, issued by PGF	New York Stock Exchange
4.875% Global Notes due 2020, issued by PGF	New York Stock Exchange
6.250% Global Notes due 2024, issued by PGF	New York Stock Exchange
7.250% Global Notes due 2044, issued by PGF	New York Stock Exchange
Floating Rate Global Notes due 2017, issued by PGF	New York Stock Exchange
Floating Rate Global Notes due 2020, issued by PGF	New York Stock Exchange
6.850% Global Notes due 2115, issued by PGF	New York Stock Exchange

\* Not for trading, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the New York Stock Exchange.

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

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

**The number of outstanding shares of each class of stock as of December 31, 2015 was:**

7,442,454,142 Petrobras Common Shares, without par value

5,602,042,788 Petrobras Preferred Shares, without par value

**Indicate by check mark if the registrant is a well-known seasoned issuer, as defined by Rule 405 of the Securities Act.**

**Yes R No**

**If this report is an annual or transitional report, indicate by check mark if the registrant is not required to file reports pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934.**

**Yes  No R**

**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 R No**

**Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).**

**Yes R No**

**Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):**

**Large accelerated filer R Accelerated filer  Non-accelerated filer**

**Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:**

**U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board R Other**

**If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.**

**Item 17  Item 18**

**If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).**

**Yes  No**

---

## TABLE OF CONTENTS

		<b>Page</b>
<u>Forward-Looking Statement.</u>		<u>3</u>
<u>Glossary of Certain Terms Used in this Annual Report</u>		<u>5</u>
<u>Conversion Table</u>		<u>11</u>
<u>Abbreviations</u>		<u>12</u>
<u>Presentation of Financial and Other Information</u>		<u>13</u>
<u>Presentation of Information Concerning Reserves</u>		<u>14</u>
<b>PART I</b>		<b><u>15</u></b>
<u>Item 1.</u>	<u>Identity of Directors, Senior Management and Advisers</u>	<u>15</u>
<u>Item 2.</u>	<u>Offer Statistics and Expected Timetable</u>	<u>15</u>
<u>Item 3.</u>	<u>Key Information</u>	<u>15</u>
<u>Selected Financial Data</u>		<u>15</u>
<u>Risk Factors</u>		<u>17</u>
<u>Item 4.</u>	<u>Information on the Company</u>	<u>37</u>
<u>History and Development</u>		<u>37</u>
<u>Overview of the Group</u>		<u>37</u>
<u>Exploration and Production</u>		<u>40</u>
<u>Refining, Transportation and Marketing</u>		<u>51</u>
<u>Distribution</u>		<u>58</u>
<u>Gas and Power</u>		<u>59</u>
<u>Biofuels</u>		<u>68</u>
<u>Corporate</u>		<u>68</u>
<u>Organizational Structure</u>		<u>69</u>
<u>Property, Plant and Equipment</u>		<u>70</u>
<u>Regulation of the Oil and Gas Industry in Brazil</u>		<u>70</u>
<u>Health, Safety and Environmental Initiatives</u>		<u>74</u>
<u>Insurance</u>		<u>76</u>
<u>Additional Reserves and Production Information</u>		<u>78</u>
<u>Item 4A.</u>	<u>Unresolved Staff Comments</u>	<u>88</u>
<u>Item 5.</u>	<u>Operating and Financial Review and Prospects</u>	<u>88</u>
<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>		<u>88</u>
<u>Overview</u>		<u>88</u>
<u>Sales Volumes and Prices</u>		<u>89</u>
<u>Effect of Taxes on Our Income</u>		<u>90</u>
<u>Inflation and Exchange Rate Variation</u>		<u>90</u>
<u>Results of Operations</u>		<u>92</u>
<u>Additional Business Segment Information</u>		<u>103</u>
<u>Liquidity and Capital Resources</u>		<u>104</u>
<u>Contractual Obligations</u>		<u>109</u>
<u>Critical Accounting Policies and Estimates</u>		<u>109</u>
<u>Research and Development</u>		<u>116</u>
<u>Trends</u>		<u>118</u>

<u>Item 6.</u>	<u>Directors, Senior Management and Employees</u>	<u>119</u>
<u>Directors and Senior Management</u>		<u>119</u>
<u>Compensation</u>		<u>125</u>
<u>Share Ownership</u>		<u>125</u>
<u>Fiscal Council</u>		<u>125</u>
<u>Audit Committee</u>		<u>126</u>
<u>Other Committees</u>		<u>127</u>
<u>Ombudsman</u>		<u>128</u>
<u>Employees and Labor Relations</u>		<u>129</u>
<u>Item 7.</u>	<u>Major Shareholders and Related Party Transactions</u>	<u>132</u>
<u>Major Shareholders</u>		<u>132</u>
<u>Related Party Transactions</u>		<u>133</u>

**TABLE OF CONTENTS (cont.)**

	<b>Page</b>
<u>Item 8. Financial Information</u>	<u>134</u>
<u>Consolidated Statements and Other Financial Information</u>	<u>134</u>
<u>Legal Proceedings</u>	<u>134</u>
<u>Internal Commissions</u>	<u>137</u>
<u>Dividend Distribution</u>	<u>138</u>
<u>Item 9. The Offer and Listing</u>	<u>138</u>
<u>Item 10. Additional Information</u>	<u>140</u>
<u>Memorandum and Articles of Incorporation</u>	<u>140</u>
<u>Restrictions on Non-Brazilian Holders</u>	<u>149</u>
<u>Transfer of Control</u>	<u>150</u>
<u>Disclosure of Shareholder Ownership</u>	<u>150</u>
<u>Material Contracts</u>	<u>150</u>
<u>Exchange Controls</u>	<u>160</u>
<u>Taxation Relating to Our ADSs and Common and Preferred Shares</u>	<u>162</u>
<u>Taxation Relating PGF's Notes</u>	<u>169</u>
<u>Documents on Display</u>	<u>176</u>
<u>Item 11. Qualitative and Quantitative Disclosures about Market Risk</u>	<u>176</u>
<u>Item 12. Description of Securities other than Equity Securities</u>	<u>179</u>
<u>American Depositary Shares</u>	<u>179</u>
<b>PART II</b>	<b>180</b>
<u>Item 13. Defaults, Dividend Arrearages and Delinquencies</u>	<u>180</u>
<u>Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	<u>180</u>
<u>Item 15. Controls and Procedures</u>	<u>180</u>
<u>Disclosure Controls and Procedures</u>	<u>180</u>
<u>Management's Report on Internal Control over Financial Reporting</u>	<u>180</u>
<u>Changes in Internal Control Over Financial Reporting</u>	<u>188</u>
<u>Item 16A. Audit Committee Financial Expert</u>	<u>188</u>
<u>Item 16B. Code of Ethics</u>	<u>188</u>
<u>Item 16C. Principal Accountant Fees and Services</u>	<u>189</u>
<u>Audit and Non-Audit Fees</u>	<u>189</u>
<u>Audit Committee Approval Policies and Procedures</u>	<u>190</u>
<u>Item 16D. Exemptions from the Listing Standards for Audit Committees</u>	<u>190</u>
<u>Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	<u>190</u>
<u>Item 16F. Change in Registrant's Certifying Accountant</u>	<u>190</u>
<u>Item 16G. Corporate Governance</u>	<u>190</u>
<b>PART III</b>	<b>193</b>
<u>Item 17. Financial Statements</u>	<u>193</u>
<u>Item 18. Financial Statements</u>	<u>193</u>

Item 19. Exhibits  
Signatures.

193  
199



## **FORWARD-LOOKING STATEMENTS**

This annual report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act, that are not based on historical facts and are not assurances of future results. The forward-looking statements contained in this annual report, which address our expected business and financial performance, among other matters, contain words such as “believe,” “expect,” “estimate,” “anticipate,” “intend,” “plan,” “aim,” “may,” “should,” “could,” “would,” “likely,” “potential” and similar expressions.

**Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. There is no assurance that the expected events, trends or results will actually occur.**

We have made forward-looking statements that address, among other things:

- our marketing and expansion strategy;
- our exploration and production activities, including drilling;
- our activities related to refining, import, export, transportation of oil, natural gas and oil products, petrochemicals, power generation, biofuels and other sources of renewable energy;
- our projected and targeted capital expenditures and other costs, commitments and revenues;
- our liquidity and sources of funding;
- our pricing strategy and development of additional revenue sources; and
- the impact, including cost, of acquisitions and divestments.

Our forward-looking statements are not guarantees of future performance and are subject to assumptions that may prove incorrect and to risks and uncertainties that are difficult to predict. Our actual results could differ materially from those expressed or forecast in any forward-looking statements as a result of a variety of assumptions and factors. These factors include, but are not limited to, the following:

- our ability to obtain financing;
- general economic and business conditions, including crude oil and other commodity prices, refining margins and prevailing exchange rates;
- global economic conditions;

- our ability to find, acquire or gain access to additional reserves and to develop our current reserves successfully;
- uncertainties inherent in making estimates of our oil and gas reserves, including recently discovered oil and gas reserves;
- competition;
- technical difficulties in the operation of our equipment and the provision of our services;

Table of Contents

- changes in, or failure to comply with, laws or regulations, including with respect to fraudulent activity, corruption and bribery;
- receipt of governmental approvals and licenses;
- international and Brazilian political, economic and social developments;
- natural disasters, accidents, military operations, acts of sabotage, wars or embargoes;
- the cost and availability of adequate insurance coverage;
- our ability to successfully implement assets sales under our divestment program;
- the outcome of ongoing corruption investigations and any new facts or information that may arise in relation to the Lava Jato investigation;
- the effectiveness of our risk management policies and procedures, including operational risk; and
- litigation, such as class actions or enforcement or other proceedings brought by governmental and regulatory agencies.

For additional information on factors that could cause our actual results to differ from expectations reflected in forward-looking statements, see “Risk Factors” in this annual report.

All forward-looking statements attributed to us or a person acting on our behalf are qualified in their entirety by this cautionary statement. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events or for any other reason.

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.

**GLOSSARY OF CERTAIN TERMS USED IN THIS ANNUAL REPORT**

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

ADR	American Depositary Receipt.
ADS	American Depositary Share.
AMS	Our health care plan ( <i>Assistência Multidisciplinar de Saúde</i> ).
ANEEL	The <i>Agência Nacional de Energia Elétrica</i> (National Electrical Energy Agency), or ANEEL, is the federal agency that regulates the electricity industry in Brazil.
ANP	The <i>Agência Nacional de Petróleo, Gás Natural e Biocombustíveis</i> (National Petroleum, Natural Gas and Biofuels Agency), or ANP, is the federal agency that regulates the oil, natural gas and renewable fuels industry in Brazil.
API	Standard measure of oil density developed by the American Petroleum Institute.
Assignment Agreement	An agreement under which the Brazilian federal government assigned to us the right to explore and produce oil, natural gas and other fluid hydrocarbons in specified pre-salt areas in Brazil. See Item 10. “Additional Information—Material Contracts—Assignment Agreement.” Also referred to as the “Transfer of Rights Agreement.”
Bahiagás	Companhia de Gás da Bahia, the natural gas distribution company for the State of Bahia.
Banco do Brasil	Banco do Brasil S.A.
Bank of New York Mellon	The Bank of New York Mellon, which serves as depositary for both our common and preferred ADSs.
Barrels	Standard measure of crude oil volume.
BEAR	The Bear Insurance Company Ltd, our Bermudian subsidiary.
BMF&BOVESPA	The São Paulo Stock Exchange.
Braskem	Braskem S.A.
Brent Crude Oil	A major trading classification of light crude oil that serves as a major benchmark price for purchases of crude oil worldwide.
BNDES	The <i>Banco Nacional de Desenvolvimento Econômico e Social</i> (the Brazilian Development Bank).
BSR	Buoyancy supported riser.
<i>Câmara de Arbitragem do Mercado</i>	An arbitration chamber governed and maintained by the BM&FBOVESPA.

Table of Contents

CCEE	The <i>Câmara de Comercialização de Energia Elétrica</i> (Electric Energy Trading Chamber).
CDB	The China Development Bank.
CEG Rio	Gas Natural Fenosa, the natural gas distribution company for the State of Rio de Janeiro.
Central Depositária	The <i>Central Depositária de Ativos e de Registro de Operações do Mercado</i> , which serves as the custodian of our common and preferred shares (including those represented by ADSs) on behalf of our shareholders.
CGDU	The <i>Controladoria Geral da União</i> (General Federal Inspector's Office), or CGDU, is an advisory body of the Brazilian Presidency, responsible for assisting in matters related to the protection of federal public property ( <i>patrimônio público</i> ) and the improvement of transparency in the Brazilian executive branch, through internal control activities, public audits, and the prevention and combat of corruption, among others.
CMN	The <i>Conselho Monetário Nacional</i> (National Monetary Council), or CMN, is the highest authority of the Brazilian financial system, responsible for the formulation of the Brazilian currency and credit policy.
CNODC	CNODC Brasil Petróleo e Gás Ltda.
CNOOC	CNOOC Petroleum Brasil Ltda.
Condensate	Light hydrocarbon substances produced with natural gas, which condense into liquid at normal temperature and pressure.
Comperj	The <i>Complexo Petroquímico do Rio de Janeiro – Comperj</i> (Petrochemical Complex of Rio de Janeiro).
CONAMA	The <i>Conselho Nacional do Meio Ambiente</i> (National Council for the Environment).
COSO	Committee of Sponsoring Organizations of the Treadway Commission.
COSO-ERM	Committee of Sponsoring Organizations of the Treadway Commission – Enterprise Risk Management Integrated Framework.
CNPE	The <i>Conselho Nacional de Política Energética</i> (National Energy Policy Council), or CNPE, is an advisory body of the President of the Republic assisting in the formulation of energy policies and guidelines.
CVM	The <i>Comissão de Valores Mobiliários</i> (Brazilian Securities and Exchange Commission), or CVM.
D&M	DeGolyer and MacNaughton.
Deep water	Between 300 and 1,500 meters (984 and 4,921 feet) deep.

Table of Contents

Distillation	A process by which liquids are separated or refined by vaporization followed by condensation.
Doj	The U.S. Department of Justice.
Eletrobras	Centrais Elétricas Brasileiras S.A. – Eletrobras.
ERP	Enterprise Resource Planning.
EWT	Extended well test.
Exploration area	A region in Brazil under a regulatory contract without a known hydrocarbon accumulation or with a hydrocarbon accumulation that has not yet been declared commercial.
Fitch	Fitch Ratings Inc., a credit rating agency.
FPSO	Floating production, storage and offloading unit.
Gaspetro	Petrobras Gás S.A.
GSA	Long-term Gas Supply Agreement entered into with the Bolivian state-owned company Yacimientos Petroliferos Fiscales Bolivianos.
GTB	Gas Transboliviano S.A.
Heavy (crude) oil	Crude oil with API density less than or equal to 22°.
HSE	Health, Safety and Environmental.
IASB	International Accounting Standards Board.
IBAMA	The <i>Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis</i> (Brazilian Institute of the Environment and Renewable Natural Resources).
IBGC	The <i>Instituto Brasileiro de Governança Corporativa</i> (Brazilian Institute of Corporate Governance).
IBGE	The <i>Instituto Brasileiro de Geografia e Estatística</i> (Brazilian Institute of Geography and Statistics).
IOF	<i>Imposto sobre Operações Financeiras</i> (Brazilian taxes over financial transactions).
IPCA	The <i>Índice Nacional de Preços ao Consumidor Amplo</i> (National Consumer Price Index).
ISO	The International Organization for Standardization.
Intermediate (crude) oil	Crude oil with API density higher than 22° and less than or equal to 31°.

Table of Contents

Lava Jato investigation	See Item 3. “Key Information—Risk Factors—Compliance and Control Risks” and Item 8. “Financial Information—Legal Proceedings—Lava Jato Investigation.”
LFTs	<i>Letras Financeiras do Tesouro</i> (Brazilian federal government bonds).
Light (crude) oil	Crude oil with API density higher than 31°.
LNG	Liquefied natural gas.
LPG	Liquefied petroleum gas, which is a mixture of saturated and unsaturated hydrocarbons, with up to five carbon atoms, used as domestic fuel.
Mitsui	Mitsui Gás e Energia do Brasil Ltda.
MME	The <i>Ministério de Minas e Energia</i> (Ministry of Mines and Energy) of Brazil.
Moody’s	Moody’s Investors Service, Inc., a credit rating agency.
MPBM	The <i>Ministério do Planejamento, Orçamento e Gestão</i> (Ministry of Planning, Budget and Management) of Brazil.
NGLs	Natural gas liquids, which are light hydrocarbon substances produced with natural gas, which condense into liquid at normal temperature and pressure.
NYSE	The New York Stock Exchange.
OHSAS	Occupational Health and Safety Management Systems.
Oil	Crude oil, including NGLs and condensates.
ONS	The <i>Operador Nacional do Sistema Elétrico</i> (National Electric System Operator) of Brazil.
OPEC	Organization of the Petroleum Exporting Countries.
OSRL	The Oil Spill Response Limited.
PDVSA	Petróleos de Venezuela S.A.
Pesa	Petrobras Argentina S.A.
Petros	Petrobras’s employee pension fund.
Petros 2	Petrobras’s sponsored pension plan.

Table of Contents

PFC Energy	A global energy research and consultancy group.
PGF	Petrobras Global Finance B.V.
PifCo	Petrobras International Finance Company S.A.
PLSV	Pipe laying support vessel.
PO&G	Petrobras Oil & Gas.
Post-salt reservoir	A geological formation containing oil or natural gas deposits located above a salt layer.
PPSA	Pré-Sal Petróleo S.A.
Pre-salt reservoir	A geological formation containing oil or natural gas deposits located beneath a salt layer.
Proved reserves	Consistent with the definitions in Rule 4-10(a) of Regulation S-X, proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible – from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations. Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price is the average price during the 12-month period prior to December 31, 2015, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The project to extract the hydrocarbons must have commenced or we must be reasonably certain that we will commence the project within a reasonable time.
	Reserves which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the “proved” classification when successful testing by a pilot project, or the operation of an installed program in the reservoir, provides support for the engineering analysis on which the project or program was based.
Proved developed reserves	Reserves that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or for which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserve estimate if the extraction is by means not involving a well.
Proved reserves	Consistent with the definitions in Rule 4-10(a) of Regulation S-X, proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible – from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations. Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be



determined. The price is the average price during the 12-month period prior to December 31, 2015, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The project to extract the hydrocarbons must have commenced or we must be reasonably certain that we will commence the project within a reasonable time.

Reserves which can be produced economically through application of improved recovery techniques (such as fluid injection) are included in the "proved" classification when successful testing by a pilot project, or the operation of an installed program in the reservoir, provides support for the engineering analysis on which the project or program was based.

Proved developed reserves

Reserves that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or for which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserve estimate if the extraction is by means not involving a well.

Proved undeveloped reserves

Reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required. Reserves on undrilled acreage are limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

Undrilled locations are classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances justify a longer time. Proved undeveloped reserves do not include reserves attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir or by other evidence using reliable technology establishing reasonable certainty.

Table of Contents

PTAX	The reference exchange rate for the purchase and sale of U.S. dollars in Brazil, as published by the Brazilian Central Bank.
PwC	PricewaterhouseCoopers Auditores Independentes.
Rnest	The <i>Refinaria Abreu e Lima</i> (Abreu e Lima Refinery).
S&P	Standard & Poor's Financial Services LLC, a credit rating agency.
SDNY	The United States District Court for the Southern District of New York.
SEC	The United States Securities and Exchange Commission.
SELIC	The Brazilian Central Bank base interest rate.
Sete Brasil	Sete Brasil Participações, S.A.
Suape Petrochemical Complex	The <i>Complexo Industrial Petroquímica Suape</i> , an industrial complex with facilities owned by Companhia Petroquímica de Pernambuco – Petroquímica Suape and Companhia Integrada Têxtil de Pernambuco – Citepe.
Shell	Shell Brasil Petróleo Ltda.
SPE	The Society of Petroleum Engineers.
SS	Semi-submersible unit.
Synthetic oil and synthetic gas	A mixture of hydrocarbons derived by upgrading (i.e., chemically altering) natural bitumen from oil sands, kerogen from oil shales, or processing of other substances such as natural gas or coal. Synthetic oil may contain sulfur or other non-hydrocarbon compounds and has many similarities to crude oil.
TCU	The <i>Tribunal de Contas da União</i> (Federal Auditor's Office), or TCU, is an advisory body of the Brazilian Congress, responsible for assisting it in matters related to the supervision of the Brazilian executive branch with respect to accounting, finance, budget, operational and public property ( <i>patrimônio público</i> ) matters.
TBG	Transportadora Brasileira Gasoduto Bolívia-Brasil S.A. (TBG).
TLWP	Tension Leg Wellhead Platform.
Total	Total E&P do Brasil Ltda.
Total depth	Total depth of a well, including vertical distance through water and below the mudline.

Table of Contents

Transpetro	Petrobras Transporte S.A.
Ultra-deep water	Over 1,500 meters (4,921 feet) deep.
YPFB	Yacimientos Petroliferos Fiscales Bolivianos.

**CONVERSION TABLE**

1 acre	= 43,560 square feet	= 0.004047 km <sup>2</sup>
1 barrel	= 42 U.S. gallons	= Approximately 0.13 t of oil
1 boe	= 1 barrel of crude oil equivalent	= 6,000 cf of natural gas
1 m <sup>3</sup> of natural gas	= 35.315 cf	= 0.0059 boe
1 km	= 0.6214 miles	
1 meter	= 3.2808 feet	
1 t of crude oil	= 1,000 kilograms of crude oil	= Approximately 7.5 barrels of crude oil (assuming an atmospheric pressure index gravity of 37° API)

Table of Contents**ABBREVIATIONS**

bbbl	Barrels
bcf	Billion cubic feet
bn	Billion (thousand million)
bnbbbl	Billion barrels
bncf	Billion cubic feet
bnm <sup>3</sup>	Billion cubic meters
boe	Barrels of oil equivalent
bnboe	Billion barrels of oil equivalent
bbbl/d	Barrels per day
cf	Cubic feet
GWh	One gigawatt of power supplied or demanded for one hour
km	Kilometer
km <sup>2</sup>	Square kilometers
m <sup>3</sup>	Cubic meter
mbbl	Thousand barrels
mbbl/d	Thousand barrels per day
mboe	Thousand barrels of oil equivalent
mboe/d	Thousand barrels of oil equivalent per day
mcf	Thousand cubic feet
mcf/d	Thousand cubic feet per day
mm <sup>3</sup>	Thousand cubic meters
mm <sup>3</sup> /d	Thousand cubic meters per day
mm <sup>3</sup> /y	Thousand cubic meter per year
mmbbl	Million barrels
mmbbl/d	Million barrels per day
mamboe	Million barrels of oil equivalent
mamboe/d	Million barrels of oil equivalent per day
mmcf	Million cubic feet
mmcf/d	Million cubic feet per day
mmm <sup>3</sup>	Million cubic meters
mmm <sup>3</sup> /d	Million cubic meters per day
mmt	Million metric tons
mmt/y	Million metric tons per year
MW	Megawatts
MWavg	Amount of energy (in MWh) divided by the time (in hours) in which such energy is produced or consumed
MWh	One megawatt of power supplied or demanded for one hour
ppm	Parts per million
P\$	Argentine pesos
R\$	Brazilian <i>reais</i>
t	Metric ton
Tcf	Trillion cubic feet
US\$	United States dollars

/d Per day  
/y Per year

12

---

## **PRESENTATION OF FINANCIAL AND OTHER INFORMATION**

This is the annual report of Petróleo Brasileiro S.A.—Petrobras, or Petrobras. Unless the context otherwise requires, the terms “Petrobras,” “we,” “us,” and “our” refer to Petróleo Brasileiro S.A.—Petrobras and its consolidated subsidiaries, joint operations and structured entities.

We currently issue notes in the international capital markets through our wholly-owned finance subsidiary Petrobras Global Finance B.V., or PGF, a private company with limited liability incorporated under the law of The Netherlands. We fully and unconditionally guarantee the notes issued by PGF. In the past, we used our former wholly-owned subsidiary, Petrobras International Finance Company S.A., or PifCo, as a vehicle to issue notes that we fully and unconditionally guaranteed. On December 29, 2014, PifCo merged into PGF, and PGF assumed PifCo’s obligations under all outstanding notes originally issued by PifCo (together with the notes issued by PGF, the “PGF notes”), which continue to benefit from our full and unconditional guarantee. PGF is not required to file periodic reports with the U.S. Securities and Exchange Commission, or SEC. See Note 36 to our audited consolidated financial statements.

In this annual report, references to “*real*,” “*reais*” or “R\$” are to Brazilian and references to “U.S. dollars” or “US\$” 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.

Our audited consolidated financial statements as of and for each of the three years ended December 31, 2015, 2014 and 2013 and the accompanying notes contained in this annual report have been presented in U.S. dollars and prepared in accordance with International Financial Reporting Standards, or IFRS, issued by the International Accounting Standards Board, or IASB. See Item 5. “Operating and Financial Review and Prospects” and Note 2 to our audited consolidated financial statements. Petrobras applies IFRS in its statutory financial statements prepared in accordance with Brazilian Corporate Law and regulations promulgated by the CVM.

Our IFRS financial statements filed with the CVM are presented in *reais*, while the presentation currency of the audited consolidated financial statements included herein is the U.S. dollar. The functional currency of Petrobras and all of its Brazilian subsidiaries is the *real*. The functional currency of Petrobras Argentina is the Argentine peso, and the functional currency of most of our other entities that operate internationally is the U.S. dollar. As described more fully in Note 2.2 to our audited consolidated financial statements, the U.S. dollar amounts for the periods presented have been translated from the *real* amounts in accordance with the criteria set forth in IAS 21 – “The effects of changes in foreign exchange rates.” Based on IAS 21, we have translated all assets and liabilities into U.S. dollars at the exchange rate as of the date of the balance sheet and all accounts in the statement of income and statement of cash flows at the average rates prevailing during the corresponding year.

Unless the context otherwise indicates:

- data contained in this annual report regarding capital expenditures, investments and other expenditures during the corresponding year that were not derived from the audited consolidated financial statements have been translated from *reais* at the average rates prevailing during such corresponding year;
- historical data contained in this annual report regarding balances of investments, commitments or other related expenditures that were not derived from the audited consolidated financial statements have been translated from *reais* at the period-end exchange rate; and

Table of Contents

- forward-looking amounts, including estimated future capital expenditures and investments, have all been based on our 2015-2019 Business and Management Plan, as originally approved in June 2015 and further revised in January 2016 (“2015-2019 Plan”), and have been projected on a constant basis and have been translated from *reais* using an estimated average exchange rate of R\$4.06 to US\$1.00 for 2016, in accordance with our 2015-2019 Plan. In addition, in accordance with our 2015-2019 Plan, future calculations involving an assumed price of crude oil have been calculated using an average Brent crude oil price of US\$45 per barrel for 2016.

## **PRESENTATION OF INFORMATION CONCERNING RESERVES**

We apply the SEC rules for estimating and disclosing oil and natural gas reserve quantities included in this annual report. In accordance with those rules, we estimate reserve volumes using the average prices calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period, except for reserves in certain fields for which volumes have been estimated using gas prices as set forth in our contractual arrangements for the sale of gas. Reserve volumes of non-traditional reserves, such as synthetic oil and gas, are also included in this annual report in accordance with SEC rules. In addition, the rules also utilize a reliable technology definition that permits reserves to be added based on field-tested technologies.

DeGolyer and MacNaughton (D&M) used our reserve estimates to conduct a reserves audit of 95.2% of our net proved crude oil, condensate and natural gas reserves as of December 31, 2015 in certain properties we own in Brazil. In addition, D&M used its own estimates of our reserves to conduct a reserves evaluation of 100% of the net proved crude oil, condensate, NGL and natural gas reserves as of December 31, 2015 from the properties we operate in Argentina. Furthermore, D&M used our reserve estimates to conduct a reserves audit of 100% of the net proved crude oil, condensate and natural gas reserves as of December 31, 2015 in properties we operate in the United States. The reserve estimates were prepared in accordance with the reserves definitions in Rule 4-10(a) of Regulation S-X. 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.

On January 29, 2016, we filed proved reserve estimates for Brazil with the ANP, in accordance with Brazilian rules and regulations, totaling net volumes of 10.7 bnbbbl of crude oil, condensate and synthetic oil and 13.1 tcf of natural gas and synthetic gas. The reserve estimates filed with the ANP were approximately 27% higher than those provided herein in terms of oil equivalent. This difference is due to: (i) the fact that the ANP permits the estimation of proved reserves through the technical-economical abandonment of production wells, as opposed to limiting reserve estimates to the life of the concession contracts as required by Rule 4-10 of Regulation S-X; and (ii) different technical criteria for booking proved reserves, including the use of future oil prices projected by Petrobras as opposed to the SEC requirement that the 12-month average price be used to determine the economic producibility of the reserves.



We also file reserve estimates from our international operations with various governmental agencies under the guidelines of the SPE. The aggregate reserve estimates from our international operations, under SPE guidelines, amounted to 0.2 bnbbbl of crude oil, condensate and NGL and 0.9 tcf of natural gas as of December 31, 2015, which is approximately 6% higher than the reserve estimates calculated under Regulation S-X, as provided herein. This difference is due to different technical criteria for booking proved reserves, including the use of future oil prices projected by Petrobras as opposed to the SEC requirement that the 12-month average price be used to determine the economic producibility of the reserves.

**PART I****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**

This section contains selected consolidated financial data presented in U.S. dollars and prepared in accordance with IFRS as of and for each of the five years ended December 31, 2015, 2014, 2013, 2012 and 2011, derived from our audited consolidated financial statements, which were audited by PricewaterhouseCoopers Auditores Independentes–PwC for the years ended December 31, 2015, 2014, 2013 and 2012 and KPMG Auditores Independentes for the year ended December 31, 2011.

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.”

**BALANCE SHEET DATA****IFRS Summary Financial Data**

	<b>As of December 31,</b>				
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
	<b>(US\$ million)</b>				
<b>Assets:</b>					
Cash and cash equivalents	25,058	16,655	15,868	13,520	19,057
Marketable securities	7809,323		3,885	10,431	8,961
Trade and other receivables, net	5,8037,969		9,670	11,099	11,756
Inventories	7,44111,466		14,225	14,552	15,165
Assets classified as held for sale	1525		2,407	143	–
Other current assets	4,1945,414		6,600	8,049	9,653
Long-term receivables	19,17718,863		18,782	18,856	18,962
Investments	3,5275,753		6,666	6,106	6,530
Property, plant and equipment	161,297218,730		227,901	204,901	182,918
Intangible assets	3,092	4,509	15,419	39,739	43,412
Total assets	230,521	298,687	321,423	327,396	316,414

**Liabilities and shareholders' equity:**

Total current liabilities	28,573	31,118	35,226	34,070	36,364
Non-current liabilities(1)	24,411	30,373	30,839	42,976	34,744
Non-current finance debt(2)	111,482	120,218	106,235	88,484	72,718
Total liabilities	164,466	181,709	172,300	165,530	143,826

**Shareholders' equity**

Share capital (net of share issuance costs)	107,101	107,101	107,092	107,083	107,076
Reserves and other comprehensive income (deficit)(3)	(41,865)	9,171	41,435	53,631	64,240
Shareholders' equity attributable to the shareholders of Petrobras	65,236	116,272	148,527	160,714	171,316
Non-controlling interests	819	706	596	1,152	1,272
Total shareholders' equity	66,055	116,978	149,123	161,866	172,588
Total liabilities and shareholders' equity	230,521	298,687	321,423	327,396	316,414

---

(1) Excludes non-current finance debt.

(2) Excludes current portion of long-term finance debt.

(3) Change in interest in subsidiaries, profit reserve and accumulated other comprehensive income (deficit).

**INCOME STATEMENT DATA****IFRS Summary Financial Data**

	<b>For the Year Ended December 31,</b>				
	<b>2015 (1)</b>	<b>2014 (1)</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
	<b>(US\$ million, except for share and per share data)</b>				
Sales revenues	97,314	143,657	141,462	144,103	145,915
Net income (loss) before finance income (expense), share of earnings in equity-accounted investments, profit sharing and income taxes	(1,130)	(6,963)	16,214	16,900	27,285
Net income (loss) attributable to the shareholders of Petrobras	(8,450)	(7,367)	11,094	11,034	20,121
Weighted average number of shares outstanding:					
Common	7,442,454,142	7,442,454,142	7,442,454,142	7,442,454,142	7,442,454,142
Preferred	5,602,042,788	5,602,042,788	5,602,042,788	5,602,042,788	5,602,042,788
Net income (loss) before financial results, profit sharing and income taxes per:					
Common and Preferred shares	(0.09)	(0.53)	1.24	1.30	2.09
Common and Preferred ADS	(0.18)	(1.06)	2.48	2.60	4.18
Basic and diluted earnings (losses) per:					
Common and Preferred shares	(0.65)	(0.56)	0.85	0.85	1.54
Common and Preferred ADS	(1.30)	(1.12)	1.70	1.70	3.08
Cash dividends per(2):					
Common shares	--	--	0.22	0.24	0.53
Preferred shares	--	--	0.41	0.48	0.53

Common ADS	--	0.44	0.48	1.06
Preferred ADS	--	0.82	0.96	1.06

- 
- (1) In 2014, we wrote-off US\$2,527 million of overpayments incorrectly capitalized. In 2015 and 2014, we recognized impairment losses of US\$12,299 million and US\$16,823 million, respectively. See Notes 3 and 14 to our audited consolidated financial statements for further information.
- (2) Pre-tax interest on capital and/or dividends proposed for the year. Amounts were translated from the original amounts in *reais* using the balance sheet date exchange rate.

## RISK FACTORS

### Risks Relating to Our Operations

***We have substantial liabilities and may be exposed to significant liquidity constraints in the near and medium term, which could materially and adversely affect our financial condition and results of operations, and which has required that we modify our business plan and strategy.***

We have incurred a substantial amount of debt in order to finance the capital expenditures needed to meet our long-term objectives. As our cash flow from operations in recent years has not been sufficient to fund our capital expenditures and payment of interest, principal and dividends, our debt has significantly increased since 2010. Our total debt (including accrued interest) decreased by 4% to US\$126,165 million as of December 31, 2015 from US\$132,086 million as of December 31, 2014, and increased by 10% from US\$114,236 million as of December 31, 2013. Our debt, net of cash, cash equivalents and marketable securities decreased by 5% to US\$100,328 million as of December 31, 2015 compared to US\$106,108 million as of December 31, 2014, and increased by 6% from US\$94,483 million as of December 31, 2013. 33% of our existing debt (principal), or US\$40.6 billion, will mature in the next three years. In order to develop our oil and natural gas reserves, maintain our ability to supply the Brazilian domestic market and service our debt, we will need to raise significant amounts of debt capital from a broad range of funding sources, as well as rely on the potential proceeds from assets sales under our divestment program.

To service our debt after providing for capital expenditures, we have relied upon, and may continue to rely upon, a combination of cash flows provided by our operations, divestments, additional debt facilities, and drawing down our cash and short-term financial investments balance.

We lost our Moody's, S&P and Fitch investment grade ratings for all of our credit ratings in February, September and December 2015, respectively, and have experienced further credit rating downgrades since then. Credit rating agencies continue to express concern regarding (i) liquidity pressures and our capacity to meet our principal and interest payment obligations maturing in the short- and medium-term, (ii) the total size of our debt, (iii) the increase in our indebtedness and leverage over the last few years, (iv) the significant decline in international crude oil prices, (v) the sharp devaluation of the *real* and (vi) the challenges involved in successfully implementing our divestment program.

The loss of our investment grade credit rating and any further lowering of our credit ratings has had, and may continue to have adverse consequences on our ability to obtain financing or may impact our cost of financing, also making it more difficult or costly to refinance maturing obligations. Our inability to obtain financing on favorable terms could have an adverse effect on our results of operations and financial condition. The loss of our investment grade credit

rating resulted and may continue to result in a less liquid market for our debt and equity securities, because certain institutions are unable to purchase our securities, therefore reducing our investor base.

If, for any reason, we are faced with continued difficulties in accessing debt financing, this could impair our ability to timely meet our principal and interest payment obligations with our creditors, and hamper our ability to achieve our long-term objectives as our cash flow from operations is currently insufficient to fund both our debt service obligations and our planned capital expenditures. As a result of the above, we may not be able to make the capital expenditures in the amounts needed to maintain our long-term objectives, which may adversely affect our results of operations and financial condition.

If such constraints occur at a time when our cash flow from operations are less than the resources needed to fund our capital expenditures or to meet our principal and interest payments obligations, in order to provide additional liquidity to our operations, we could be forced to further reduce our planned capital expenditures and increase the numbers of assets to be sold under our divestment program. A reduction in our capital expenditure program or the sale of strategic assets under our divestment program could affect our results of operations and financial condition.



Table of Contents

Despite the fact that the Brazilian federal government (as our controlling shareholder) is not responsible or liable for any of our liabilities – including those derived from the bonds we issue in the international capital markets – our credit rating is sensitive to any change in the Brazilian federal government credit rating. The credit rating of the Brazilian federal government has been downgraded in 2015 and 2016, and is no longer investment grade. Any further lowering of the Brazilian federal government credit ratings may have additional adverse consequences on our ability to obtain financing or our cost of financing, and consequently, on our results of operations and financial condition.

***We are vulnerable to increased debt service resulting from depreciation of the real in relation to the U.S. dollar and increases in prevailing market interest rates.***

As of December 31, 2015, approximately 84% of our financial debt liabilities was denominated in currencies other than the *real* (74% of which was denominated in U.S. dollars). A substantial portion of our indebtedness is, and is expected to continue to be, denominated in or indexed to the U.S. dollar and other foreign currencies. A further depreciation of the *real* against these other currencies will increase our debt service in *reais*, as the amount of *reais* necessary to pay principal and interest on foreign currency debt will increase with this depreciation. Considering the average exchange rate of each year, from 2003 to 2011, the *real* appreciated against the U.S. dollar each year (by an average of 7% per year), except for 2009 (when it depreciated by 9%). In 2015, the *real* depreciated 41.8% against the U.S. dollar, compared to depreciation of 9.1% in 2014, 10.4% in 2013 and depreciation of 16.7% in 2012. Through April 22, 2016, the *real* has rebounded, appreciating by 8.2% compared to December 31, 2015.

This foreign exchange variation will have an immediate impact on our reported income, except for a portion of our obligations denominated in U.S. dollars that are subject to our hedge accounting policy. According to our hedge accounting policy, hedge designations are made to the extent that future exports are considered to be highly probable. On December 31, 2015, the average ratio of highly probable future exports to debt instruments for which a hedging relationship has been designated in the future periods was 60%. The average ratio for the period of 2016-2019 was 80%, while for the period of 2020-2026 was 55%. Future exports may cease to be considered highly probable or even expected, which will have an impact in our future results. See Item 5. "Operating and Financial Review and Prospects—Critical Accounting Policies and Estimates—Cash Flow Hedge Accounting Involving our Future Exports."

Following a devaluation of the *real*, some of our operating expenses, capital expenditures, investments and import costs will increase. As most of our revenues are denominated in *reais*, unless we increase the prices of our products to reflect the depreciation of the *real*, our cash generation relative to our capacity to service debt may decline.

Additionally, we have debt maturities that amount to US\$78.7 billion during the next five years, a portion of which may be refinanced by issuing new debt. The cost of any new indebtedness may be negatively affected by the recent loss of our investment grade credit

rating by Moody's, S&P and Fitch and possible further downgrades. To the extent we refinance our maturing obligations with newly contracted debt, we may incur additional interest expense.

As of December 31, 2015, approximately 49% of our total indebtedness consisted of floating rate debt. We generally do not enter into derivative contracts or similar financial instruments or make other arrangements with third parties to hedge against the risk of an increase in interest rates. To the extent that such floating rates rise, we may incur additional expenses. Additionally, as we refinance our existing debt in the coming years, the mix of our indebtedness may change, specifically as it relates to the ratio of fixed to floating interest rates, the ratio of short-term to long-term debt, and the currencies in which our debt is denominated or to which it is indexed. Changes that affect the composition of our debt and cause rises in short- or long-term interest rates may increase our debt service payments, which could have an adverse effect on our results of operations and financial condition.

***Our divestment program depends on external factors that could impede its successful implementation.***

Our 2015-2019 Plan includes, among other initiatives, a divestment program that contemplates the sale of US\$15.1 billion in assets for the period 2015-2016, with the goal of improving our short-term liquidity position (by increasing our cash balance) and allowing us to deleverage. External factors, such as the sustained decline in oil prices, exchange rate fluctuations, the deterioration of Brazilian and global economic conditions and the Brazilian political crisis, among other factors may reduce or hinder sales opportunities for our assets or affect the price at which we can sell our assets, and may force us to alter the terms of our divestment program. As of April 22, 2016, we had sold approximately US\$700 million of assets under our divestment program for the 2015-2016 period. See Item 4. “Information on the Company—Overview of the Group” for further information about our divestment program. Additionally, our deleveraging efforts may have unintended consequences, including limiting our ability to maintain our long-term objectives and affecting our relationships with suppliers, customers and the local communities in which we operate.

If we are unable to successfully implement our divestment program, or if our deleveraging efforts lead to unintended consequences, this may have a material adverse effect on our business, results of operations and financial condition, including by potentially exposing us to significant liquidity constraints in the near and medium term. See “—Risks Relating to Our Operations—We have substantial liabilities and may be exposed to significant liquidity constraints in the near and medium term, which could materially and adversely affect our financial condition and results of operations, and which has required that we modify our business plan and strategy.” In addition, the sale of strategic assets under our divestment program will result in a decrease in our cash flows from operations, which could negatively impact our long-term operating growth prospects and consequently our results of operations in the medium and long-term.

***Maintaining our long-term objectives for oil production depends on our ability to successfully obtain and develop oil reserves.***

Our ability to maintain our long-term objectives for oil production is highly dependent upon our ability to successfully develop our existing reserves, and to obtain additional reserves. The development of the sizable reservoirs in deep and ultra-deep waters, including the pre-salt reservoirs that have been licensed and granted to us by the Brazilian federal government, has demanded and will continue to demand significant capital investments. A primary operational challenge, particularly for the pre-salt reservoirs, will be (i) securing the critical resources that are necessary to meet our production targets, (ii) allocating our resources to build the necessary equipment and deploy such equipment at considerable distances from the shore and (iii) securing a qualified labor force and offshore oil services to develop reservoirs of such size and magnitude in a timely manner. Also, our long-term objectives for oil production are dependent upon our ability to secure financing necessary to meet the capital expenditures needed for oil exploration and production. We cannot guarantee that we will have or will be able to obtain, in the time frame that we expect, sufficient resources and financing necessary

to exploit the reservoirs in deep and ultra-deep waters that have been licensed and granted to us, or that may be licensed and granted to us in the future.

Our ability to obtain additional reserves depends upon exploration activities, which exposes us to the inherent risks of drilling, and may not lead to the discovery of commercially productive crude oil or natural gas reserves. Drilling wells often yields uncertain results, and numerous factors beyond our control (such as unexpected drilling conditions, equipment failures or incidents, 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. In addition, increased competition in the oil and gas sector in Brazil and our own capital constraints may make it more difficult or costly to obtain additional acreage in bidding rounds for new concessions and to explore existing concessions. These factors could impede us from participating in further bidding rounds in the future and limit future exploration. We may not be able to maintain our long-term objectives for oil production unless we conduct successful exploration and development activities of our large reservoirs in a timely manner.

Table of Contents

Also, our ability to maintain our long-term objectives for oil production partially rely on major projects and operations that are conducted in joint arrangements or in partnership with other oil and gas companies. If we or our partners fail or are unable to meet with respective payment obligations under applicable contractual arrangements, this may threaten the viability of a given project, and may result either in (i) a delay or cancellation of such project, which could bring regulatory sanctions to the relevant joint arrangement or partnership, (ii) an increase or dilution of our interest in such project or (iii) our withdrawal from such project, any of which could have a material adverse effect on our results of operations and financial condition.

***International prices of crude oil, oil products and natural gas may affect us differently than our competitors and may cause our results to differ from our competitors in periods of higher international prices.***

International prices for oil and oil products are volatile and have a significant effect on us. We may not adjust our prices for products sold in Brazil when the international prices of crude oil and oil products increase, or when the *real* depreciates in relation to the U.S. dollar, which could have a negative impact on our results of operations and financial condition.

Our pricing policy in Brazil takes into account domestic market conditions and seeks to align the price of oil and oil products with international prices over the long term, however we do not necessarily adjust our prices for diesel, gasoline and other products to reflect oil price volatility in the international markets or short-term volatility of the *real* vs. U.S. dollar exchange rate. Based on the decisions of the Brazilian federal government, as our controlling shareholder, we have had, and may continue to have, periods during which our product prices will not be at parity with international product prices (See “—Risks Relating to Our Relationship with the Brazilian Federal Government—The Brazilian federal government, as our controlling shareholder, may pursue certain macroeconomic and social objectives through us that may have a material adverse effect on us.”) As a result, when we are a net importer by volume of oil and oil products to meet Brazilian demand, increases in the price of crude oil and oil products in the international markets may have a negative impact on our costs of sales and margins, since the cost to acquire such oil and oil products may exceed the price at which we are able to sell these products in Brazil. A similar effect occurs when the *real* depreciates in relation to the U.S. dollar, as we sell oil and oil products in Brazil in *reals* and international prices for crude oil and oil products are set in U.S. dollars. A depreciation of the *real* increases our cost of imported oil and oil products, without a corresponding increase in our revenues unless we are able to increase the price at which we sell products in Brazil.

The majority of our revenue is derived primarily from sales in Brazil of crude oil and oil products and, to a lesser extent, natural gas. Changes in crude oil prices typically result in changes in prices for oil products and natural gas. Historically, international prices for crude oil, oil products and natural gas have fluctuated widely as a result of many global and regional factors. Volatility and uncertainty in international prices for crude oil, oil products and natural gas may continue. For instance, on September 1, 2014, the Brent crude oil price per barrel was US\$101.37, while on May 5, 2015, the Brent crude oil price per barrel was US\$66.37, and eight months later, on January 20, 2016, the Brent crude oil price per barrel was US\$26.39. On

April 22, 2016, the Brent crude oil price per barrel was US\$44.00.

Since the last quarter of 2015, we have not adjusted our prices for gasoline, diesel and other oil products, in order to avoid passing on to the domestic market short-term volatility in (i) international prices of crude oil and oil products, and (ii) the *real* vs. U.S. dollar exchange rate. Our pricing policy for this period also took into consideration domestic market conditions.

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 may also affect the value of our proved reserves.

***We rely on key third-party suppliers and service providers to provide us with parts, components, services and critical resources that we need to operate our business and complete our major projects, which could be adversely affected by any failure or delay by such third parties in performing their obligations or any deterioration in the financial condition of such third parties.***

Our ability to maintain our long-term objectives for oil production depends upon successful delivery of major exploration and production projects. Failure to successfully deliver such major projects, or delays in doing so, could adversely affect our results of operations and financial condition.

We rely upon various key third-party suppliers, vendors and service providers to provide us with parts, components, services and critical resources, which we need to operate and expand our business. If these key suppliers, vendors and service providers critically fail to deliver, or are delayed in delivering, equipment, service or critical resources to our major projects, we may not meet our operating targets in the time frame we expected. We may ultimately need to delay or suspend one or more of our major projects, which could have an adverse effect on our results of operations and financial condition.

We are susceptible to the risks of performance, product quality and financial condition of our key suppliers, vendors and service providers. For instance, their ability to adequately and timely provide us with parts, components, services and resources critical to our major projects may be affected if they are facing financial constraints or times of general financial stress and economic downturn. As a result of the ongoing Lava Jato investigation, a number of our Brazilian contractors and suppliers have been unable to secure financing and are currently facing liquidity and bankruptcy concerns that may affect their ability to continue as our key suppliers, vendors and service providers. Although we work closely with our key suppliers, vendors and service providers to avoid supply-related problems, there can be no assurance that we will not encounter supply disruptions in the future or that we will be able to timely replace such suppliers or service providers that are not able to meet our needs, which might adversely affect a timely and successful execution of our major projects, and consequently, our results of operations and financial condition.

In 2014, we temporarily suspended the ability of 32 companies belonging to 23 corporate groups to participate as suppliers and contractors in future bids for new contracts and services with us, while we and the Brazilian authorities analyzed the involvement and participation of these companies in alleged illegal conduct in connection with the Lava Jato investigation. In 2015, this suspension was extended to two other companies. Since then, three companies have met the requirements necessary for lifting the suspension, and 31 remain suspended. See Note 3 to our audited consolidated financial statements for further information about the Lava Jato investigation. A number of these suppliers and contractors have historically acted as key suppliers, vendors and service providers for our major projects. There can be no assurance that these companies will be permitted to participate in our future major projects or that we will be able to replace such key suppliers, vendors and service providers with others that would be able to meet our needs, which could affect the successful

and timely delivery of our major future projects, and consequently our results of operations and financial condition.

We are also subject to Brazilian local content requirements arising out of our concession agreements, the Assignment Agreement and the Libra Production Sharing Agreement. As a result, we are required to acquire from domestic suppliers the majority of the parts, components, services and resources critical to our major projects. This mandatory acquisition of equipment and services from a limited number of suppliers may result in (i) higher acquisition costs and (ii) delays in the delivery of equipment. Additionally, these requirements, along with the temporary suspension of many of our local suppliers described above, could cause delays in some of our major projects if we are unable to timely replace Brazilian suppliers or service providers that fail to perform their obligations under our contracts. Unless ANP exempts us from complying with local content requirements, as to which there is no assurance, we could also face delays and fines in the execution of our current major exploration and production projects.



***We are exposed to the credit risks of certain of our customers and associated risks of default. Any material nonpayment or nonperformance by some of our customers could adversely affect our cash flow, results of operations and financial condition.***

Some of our customers may experience financial constraints or liquidity issues that could have a significant negative effect on their creditworthiness. Severe financial issues encountered by our customers could limit our ability to collect amounts owed to us, or to enforce the performance of obligations owed to us under contractual arrangements.

For instance, as of December 31, 2015, certain subsidiaries of Centrais Elétricas Brasileiras S.A. – Eletrobras owed us approximately US\$3.4 billion under energy supply agreements. In 2015 and 2014, we recognized an allowance for impairment of trade receivables from the isolated electricity sector in the Northern region of Brazil amounting to approximately US\$1.2 billion and US\$1.9 billion, respectively, mostly to cover certain trade receivables due by Eletrobras’s subsidiaries. See Note 8.4 to our audited consolidated financial statements.

In addition, many of our customers finance their activities through their cash flows from operations, the incurrence of short- and long-term debt. Declining financial results and economic conditions in Brazil, and resulting decreased cash flows, combined with a lack of debt or equity financing for our customers may affect us, since many of our customers are Brazilian, and may have significantly reduced liquidity and limited ability to make payments or perform their obligations to us. As we have not obtained any other guarantees to minimize our customers’ credit risk, their financial problems could result in a decrease in our cash flows from operations and may also reduce or curtail our customers’ future demand for our products and services, which may have an adverse effect on our results of operations and financial condition.

***Exploration and production of oil, particularly offshore, involves risks that could have a material adverse impact on our business.***

Exploration and production of oil involves risks that are increased when carried out offshore. The majority of our exploration and production activities are carried out in deep and ultra-deep waters, and the proportion of our deep water activities will remain constant or increase due to the location of our pre-salt reservoirs. Our activities, particularly offshore, present several risks, such as the risk of oil spills, explosions on platforms and in drilling operations and natural disasters. The occurrence of any of these events or other incidents could result in personal injuries, casualties, severe environmental damage with the resulting containment, clean-up and repair expenses, equipment damage and liability in civil and administrative proceedings.

The majority of the projects in which we engage in order to explore and produce oil are large, long-term projects that involve a number of different phases. Each phase of these projects is susceptible to changes in market conditions, the prices of raw materials and commodities,

foreign exchange variations, potential issues with suppliers and contractors and other possible factors that could impact the viability of the project. In addition, each of these projects is inter-dependent on other projects in our system, and a delay in, or decision not to proceed with, one project could have a material impact on one or more other projects.

Our insurance policies do not cover all liabilities, and insurance may not be available for all risks. There can be no assurance that incidents will not occur in the future, that insurance will adequately cover the entire scope or extent of our losses or that we will not be found liable in connection with claims arising from these and other events.

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

Our proved crude oil and natural gas reserves set forth in this annual report are the estimated quantities of crude oil, natural gas and NGLs 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) according to applicable regulations. 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. In 2015, our proved crude oil and natural gas reserve estimates declined 20% compared to our 2014 estimates, mainly as a result of the decrease in oil prices during 2015. Further 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 do not own any of the subsoil accumulations of crude oil and natural gas in Brazil.***

Under Brazilian law, the Brazilian federal government owns all subsoil accumulations of crude oil and natural gas in Brazil and the concessionaire owns the oil and gas it produces from those subsoil accumulations pursuant to applicable agreements executed with the Brazilian federal government. We possess, as a concessionaire of certain oil and natural gas fields in Brazil, the exclusive right to develop the volumes of crude oil and natural gas included in our reserves pursuant to concession agreements, the Libra Production Sharing Agreement and the Assignment Agreement awarded to us by the Brazilian federal government, and except for the profit oil owed to the Brazilian federal government under the Libra Production Sharing Agreement, we own the hydrocarbons we produce under those contractual arrangements. Access to crude oil and natural gas reserves is essential to an oil and gas company's sustained production and generation of income, and our ability to generate income would be adversely affected if the Brazilian federal government were to restrict or prevent us from exploiting these crude oil and natural gas reserves. In addition, we may be subject to fines by the ANP and our concessions, the Libra Production Sharing Agreement and the Assignment Agreement may be revoked if we do not comply with our obligations under such contractual arrangements.

***The Assignment Agreement we entered into with the Brazilian federal government is a related party transaction subject to future price readjustment.***

The transfer to us of oil and gas exploration and production rights related to specific pre-salt areas, subject to a maximum production of five billion boe, is governed by Law No. 12,276/2010 and by the Assignment Agreement, which is a contract between the Brazilian federal government, our controlling shareholder, and us. The negotiation of the Assignment Agreement involved significant issues, including (1) the area covered by the assignment of

rights, consisting of exploratory blocks; (2) the volume, on a barrel of oil equivalent basis, that we can extract from this area; (3) the price to be paid for the assignment of rights; (4) the terms of any subsequent revision of the contract price and volume; and (5) the terms of the reallocation of volumes among the exploratory blocks assigned to us.

The Assignment Agreement includes provisions for a subsequent revision of certain of its terms, including the price we paid for the rights we acquired. We are currently undergoing negotiations with the Brazilian federal government in accordance with the terms of the Assignment Agreement based on a number of factors, including assumptions regarding the timing of our oil and gas production, operating and investment costs, and crude oil international prices. There is no formal or official date for the conclusion of the revision process. See Item 4. "Information on the Company—Exploration and Production-Santos Basin—Assignment Agreement" and Item 10. "Material contracts—Assignment Agreement" for further information.

Table of Contents

At the time the Assignment Agreement was negotiated, the initial contract price paid by us was based on an assumed Brent oil crude price of approximately US\$80 per barrel. During the term of the Assignment Agreement, novel issues may arise in the implementation of the revision process and other provisions that could require further negotiations. Once the revision process is concluded pursuant to the terms of the Assignment Agreement, if the revised contract price is higher than the initial contract price, we will either make an additional payment to the Brazilian federal government or reduce the amount of barrels of oil equivalent subject to the Assignment Agreement.

Beginning June 2014, CNPE Resolution No. 01/2014 authorized the Brazilian federal government to directly engage Petrobras, under production sharing agreements, to produce oil, natural gas and fluid hydrocarbons in the Assignment Agreement areas at a volume exceeding the five bnboe maximum production originally agreed to under the Assignment Agreement. However, we have not initiated negotiations of the terms of these production sharing agreements and do not have an estimate of when these agreements may be executed, nor can we ensure that their terms would be favorable to us. See Item 10. “Material Contracts—Assignment Agreement— Additional Production in the Assignment Agreement Areas” and Note 12.3 to our audited consolidated financial statements.

***We are subject to numerous environmental, health and safety regulations and industry standards that are becoming more stringent and may result in increased capital and operating expenditures and decreased production.***

Our activities are subject to evolving industry standards and best practices, and a wide variety of federal, state and local laws, regulations and permit requirements relating to the protection of human health, safety and the environment, both in Brazil and in other jurisdictions in which we operate. Particularly in Brazil, our oil and gas business is subject to extensive regulation by several governmental agencies, including the ANP, ANEEL, *Agência Nacional de Transportes Aquaviários* (Brazilian Water Transportation Agency), or ANTAQ and *Agência Nacional de Transportes Terrestres* (Brazilian Land Transportation Agency), or ANTT. Failure to observe or comply with these laws and regulations could result in penalties that could adversely affect our operations. In Brazil, for example, we could be exposed to administrative and criminal sanctions, including warnings, fines and closure orders for non-compliance with these environmental, health and safety regulations, which, among other things, limit or prohibit emissions or spills of toxic substances produced in connection with our operations. Waste disposal and emissions regulations may also require us to clean up or retrofit our facilities at significant costs 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, the various Brazilian state environmental agencies and the ANP, among others, routinely inspect our facilities, and may impose fines, restrictions on operations, or other sanctions in connection with their inspections, including unexpected, temporary shutdowns and delays resulting in decreased production. In addition, we are subject to environmental laws that require us to incur significant costs to cover damage that a project may cause to the environment. 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.

Table of Contents

As environmental, health and safety regulations become more stringent with evolving industry standards, and as new laws and regulations relating to climate change, including carbon controls, become applicable to us, it is possible that our capital expenditures and investments for compliance with such laws and regulations and industry standards will increase substantially in the future. In addition, if compliance with such laws, regulations and industry standards results in significant unplanned shutdowns, there could be a material adverse effect on our production. We also cannot guarantee that we will be able to maintain or renew our licenses and permits if they are revoked or if the applicable environmental authorities oppose or delay their issuance or renewal. Increased expenditures to comply with environmental, health and safety regulations to mitigate the environmental impact of our operations or to restore the biological and geological characteristics of the areas in which we operate may result in reductions in other strategic investments. Any substantial increase in expenditures for compliance with environmental, health or safety regulations or reduction in strategic investments and significant decreases in our production from unplanned shutdowns may have a material adverse effect on our results of operations and financial condition.

***We may incur losses and spend time and financial resources defending pending litigations and arbitrations.***

We are currently a party to numerous legal proceedings relating to civil, administrative, tax, labor, environmental and corporate 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. See Item 8. “Financial Information—Legal Proceedings” and Note 30 to our audited consolidated financial statements included in this annual report for a description of the legal proceedings to which we are subject. 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 results of operations and financial condition. We may also be subject to litigation and administrative proceedings in connection with our concessions and other government authorizations, which could result in the revocation of such concessions and government authorizations. In addition, our management may be required to direct its time and attention to defending these claims, which could prevent them from focusing on our core business. Depending on the outcome, litigation could result in restrictions on our operations and have a material adverse effect on some of our businesses.

***Differing interpretations of tax regulations or changes in tax policies could have an adverse effect on our financial condition and results of operations.***

We are subject to tax rules and regulations that may be interpreted differently over time, or that may be interpreted differently by us and Brazilian tax authorities, both of which could have a financial impact on our business. For example, in the second and third quarters of 2015, we recognized material charges related to settlements of certain tax liabilities. Although unanticipated, these charges relate to the settlement of disputes relating to tax regulations that allowed for certain tax contingencies to be settled at a reduced value. In some cases,

when we have exhausted all administrative appeals relating to a tax contingency, further appeals must be made in the judicial courts, which may require that, in order to appeal, we provide collateral to judicial courts, such as the deposit of amounts equal to the potential tax liability in addition to accrued interest and penalties. In certain of these cases, settlement of the matter may be a more favorable option for us.

In the future, we may be faced with similar situations in which our interpretation of a tax regulation may differ from that of tax authorities, or tax authorities may dispute our interpretation and we may eventually take unanticipated provisions and charges. In addition, the eventual settlement of one tax dispute may have a broader impact on other tax disputes. Changes in interpretation or differing interpretations as to tax regulations, as well as our decision to settle any claims relating to such regulations, could have a material adverse effect on our financial condition and results of operations.



Table of Contents

Changes in tax policies may also have an adverse effect on us. The Brazilian federal, state and municipal governments have in the past changed tax policies in manners that affect the oil and gas industry, and they may do so again in the future. These changes may include, among other things, the creation or the increase in tax rates affecting oil and gas companies. For instance, the State of Rio de Janeiro has recently enacted laws that impose domestic value-added taxes and inspection taxes over oil and gas production within the State of Rio Janeiro. Although challenges to the constitutionality of such laws have been filed before the Brazilian Supreme Court, we cannot predict whether such challenges will prevail.

***We may face additional civil proceedings related to the Lava Jato investigation.***

We are subject to a number of civil proceedings related to the Lava Jato investigation, including a putative securities class action lawsuit against us consolidated in the United States District Court for the Southern District of New York (“SDNY”) on February 17, 2015. See Item 8. “Financial Information—Legal Proceedings” and Note 30.4 to our audited consolidated financial statements contained therein for a description of the U.S. securities class action litigation. In addition to the Consolidated Securities Class Action, to date, 29 lawsuits have been filed by individual investors before the same judge in the SDNY (two of which have been stayed), and one has been filed in the United States District Court for the Eastern District of Pennsylvania, consisting of allegations similar to those in the Consolidated Securities Class Action. The plaintiffs have not specified an amount of alleged damages in the actions. Because these actions are in their early stages, the possible loss or range of losses, if any, arising from the litigation cannot be estimated and consequently we have made no provisions with respect to this litigation. In the event that this litigation is decided against us, or we enter into an agreement to settle such matters, we may be required to pay substantial amounts. Depending on the outcome, such litigation could also result in restrictions on our operations and have a material adverse effect on our business. Petrobras has engaged a U.S. firm as legal counsel and intends to defend vigorously against the allegations made in the context of these actions. In addition, EIG Management Company filed a complaint against us on February 23, 2016 in connection with their investment in Sete Brasil Participações, S.A., or Sete Brasil. It is possible that additional complaints or claims might be filed in the United States, Brazil or elsewhere against us relating to the Lava Jato investigation in the future. Our management may be required to direct its time and attention to defending these claims, which could prevent them from focusing on our core business.

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

We generally do not maintain insurance coverage for business interruptions of any nature for our Brazilian operations, including business interruptions caused by labor action. If, for instance, our workers or those of our key third-party suppliers, vendors and service providers were to strike, the resulting work stoppages could have an adverse effect on us. In addition, we do not insure most of our assets against war or sabotage. See “—Risks Relating to Our

Operations—Strikes, work stoppages or labor unrest by our employees or by the employees of our suppliers or contractors could adversely affect our results of operations and our business.” Therefore, an attack or an operational incident causing an interruption of our business could have a material adverse effect on our results of operations and financial condition.

***Developments in the oil and gas industry (such as the recent significant decline in international crude oil and gas prices) and other factors have resulted, and may result, in substantial write-downs of the carrying amount of certain of our assets, which could adversely affect our results of operations and financial condition.***

We evaluate on an annual basis, or more frequently where the circumstances require, the carrying amount of our assets for possible impairment. Our impairment tests are performed by a comparison of the carrying amount of an individual asset or a cash-generating unit with its recoverable amount. Whenever the recoverable amount of an individual asset or cash-generating unit is less than its carrying amount, an impairment loss is recognized to reduce the carrying amount to the recoverable amount.

Table of Contents

Changes in the economic, regulatory, business or political environment in Brazil or other markets where we operate, such as the recent significant decline in international crude oil and gas prices, the devaluation of the *real* and lower projected economic growth in Brazil, as well as changes in financing conditions for such projects, among other factors, may affect the original profitability estimates of our projects and result in (i) projects being delayed or cancelled and (ii) the recognition of impairment charges in certain of our assets. For example, in 2015 and 2014, we recognized impairment charges of US\$12,299 million and US\$16,823 million, respectively, for certain of our property, plant and equipment, intangible assets and assets classified as held for sale. See Item 5. “Operating and Financial Review and Prospects—Results of Operations—2015 compared to 2014” and Item 5. “Operating and Financial Review and Prospects—Results of Operations—2014 compared to 2013”, Item 5. “Operating and Financial Review and Prospects—Critical Accounting Policies and Estimates” and Notes 5.2 and 14 to our audited consolidated financial statements for further information about the impairment of certain of our assets.

Future developments in the economic environment, in the oil and gas industry and other factors could result in further substantial impairment charges, adversely affecting our operating results and financial condition.

***Our commitment to meet the obligations of our pension plan (“Petros”) and health care benefits (“AMS”) may be higher than what is currently anticipated, and we may be required to make additional contributions of resources to Petros.***

The criteria used for determining commitments relating to pension and health care plan benefits are based on actuarial and financial estimates and assumptions with respect to (i) the calculation of projected short-term and long-term cash flows and (ii) the application of internal and external regulatory rules. Therefore, there are uncertainties inherent in the use of estimates that may result in differences between the predicted value and the actual realized value.

In addition, the financial assets held by Petros to cover pension obligations are subject to risks inherent to investment management and such assets may not generate the necessary returns to cover the relevant liabilities. Further, Petros may be required to assume the payment of additional obligations arising from court decisions unfavorable to the plan. With respect to the results of Petros, under current Brazilian law, in the event of actuarial deficits in specific circumstances, an equalization plan may be necessary and, therefore, extraordinary contributions from us, as sponsor, and our employees, may be required. An eventual equalization plan for Petros that would require contributions from us may have a material adverse effect on our results of operations and financial condition.

With respect to AMS, the projected cash flows, as well as payments and actuarial liabilities, may also be impacted by (i) substantial increases in medical costs, (ii) additional demands for better benefits and (iii) the difficulty of adjusting the contributions of participants proportionally to medical cost increases.

These risks may result in an increase in our liabilities and adversely affect our results of operations and our business. See Note 22 to our audited consolidated financial statements for further information about our employee benefits, including pension and health care plans.

***Strikes, work stoppages or labor unrest by our employees or by the employees of our suppliers or contractors, as well as potential shortages of skilled personnel, could adversely affect our results of operations and our business.***

Approximately 45% of our employees are represented by labor unions. Disagreements on issues involving divestments or changes in our business strategy, reductions in our personnel, as well as potential employee contributions to a Petros shortfall, could lead to labor unrest. In 2015, oil workers unions organized a series of protests, culminating in a strike lasting 27 days, which impacted our production levels in November 2015. This strike took place during negotiations over the social clauses of the collective bargaining agreement for 2015-2017. We cannot ensure that such strikes affecting our production levels will not occur during future negotiations. Strikes, work stoppages or other forms of labor unrest at any of our major suppliers, contractors or their facilities could impair our ability to complete major projects and impact our ability to achieve our long-term objectives.

In addition, we could experience potential shortages of skilled personnel. We recently announced a new voluntary separation incentive program open to all of our employees, and we estimate that approximately 12,000 employees will enroll in such program. If this voluntary separation incentive program is successfully implemented, and we are unable to timely replace key skilled personnel that decide to enroll in such program, this could adversely affect our results of operations and our business. See Item 6. “Directors, Senior Management and Employees—Employees and Labor Relations—Voluntary Separation Incentive Program-PIDV.” Our success also depends on our ability to continue to successfully train and qualify our personnel so they can assume qualified senior positions in the future. We cannot assure you that we will be able to properly train, qualify or retain senior management personnel, or do so without costs or delays, nor can we assure you that we will be able to find new qualified senior managers, should the need arise. Any such failure could adversely affect our results of operations and our business.

## **Compliance and Control Risks**

***We are exposed to behaviors incompatible with our ethics and compliance standards, and failure to timely detect or remedy any such behavior may have a material adverse effect on our results of operations and financial condition.***

Our business, including relationships with third parties, is guided by ethical principles. We have adopted a Code of Ethics, a Conduct Guide and a number of internal policies designed to guide our management, employees and contractors and reinforce our principles and rules for ethical behavior and professional conduct. We offer an external whistleblower channel overseen by our General Ombudsman Office for employees, contractors and other third parties. See Item 6. “Directors, Senior Management and Employees—Ombudsman.”

We are subject to the risk that our employees, contractors or any person doing business with us may engage in fraudulent activity, corruption or bribery, circumvent or override our internal controls and procedures or misappropriate or manipulate our assets for their personal or business advantage to our detriment. This risk is heightened by the fact that we have a large number of complex, valuable contracts with local and foreign suppliers, as well as the geographic distribution of our operations and the wide variety of counterparties involved in our business. We have in place a number of systems for identifying, monitoring and mitigating these risks, but our systems may not be effective.

It is difficult for us to ensure that all of our employees and contractors, totaling over 236,000, will comply with our ethical principles. Any failure – real or perceived – to follow these principles or to comply with applicable governance or regulatory obligations could harm our reputation, limit our ability to obtain financing and otherwise have a material adverse effect on our results of operations and financial condition.

***Our management has identified material weaknesses in our internal control over financial reporting, and has concluded that our internal control over financial reporting was not effective at December 31, 2015, which may have a material adverse result on our results of operation and financial condition.***

Our management identified a number of material weaknesses in our internal control over financial reporting in 2015, related to (i) management override of controls, (ii) controls related to property, plant and equipment (including deficiencies related to the review of changes in certain groupings of exploration and production assets as cash generating units and their compliance with IFRS, reclassification of certain assets for projects under construction to operating assets and the timely write-off of projects, need to write down payments advanced to contractors and suppliers that will not result in future economic benefits and recognition of termination costs of our contracts), (iii) the review and approval of manual journal entries, (iv) system access management and segregation of duties in business and information technology process, (v) provisions and contingent liabilities for legal proceedings and (vi) the calculation of actuarial liabilities. As a result, due to the identified material weaknesses, our management concluded that our internal control over financial reporting was not effective at December 31, 2015. A number of our current material weaknesses in our internal control over financial reporting were identified and reported by management at December 31, 2014. Although we have developed and implemented several measures to remedy these material weaknesses, we cannot be certain that there will be no other material weaknesses in our internal control over financial reporting in the future. For more information about these matters, see Item 15. "Controls and Procedures—Management's Report on Internal Control over Financial Reporting."

If our efforts to remediate the material weaknesses are not successful, we may be unable to report our results of operations for future periods accurately and in a timely manner and make our required filings with government authorities, including the SEC. There is also a risk that there could be accounting errors in our financial reporting, and we cannot be certain that in the future additional material weaknesses will not exist or otherwise be discovered. Any of these occurrences could adversely affect our business and operating results and could generate negative market reactions, potentially leading to a decline in the price of our shares, ADSs and debt securities.

***Ongoing SEC and DoJ investigations regarding the possibility of non-compliance with the U.S. Foreign Corrupt Practices Act could adversely affect us. Violations of this or other laws may require us to pay fines and expose us and our employees to criminal sanctions and civil suits.***

In November 2014, we received a subpoena from the SEC requesting certain documents and information about us relating to, among other things, the Lava Jato investigation and any allegations regarding a violation of the U.S. Foreign Corrupt Practices Act. The DoJ is conducting a similar inquiry, and we are voluntarily cooperating with both investigations. The internal investigation and related government inquiries concerning these matters remain ongoing, and it is still not possible to estimate the duration, scope or results of the internal investigation or related inquiries by relevant authorities. While we are cooperating fully with both investigations, adverse developments in connection with these investigations, including any expansion of the scope of the investigations, could negatively impact us and could divert the efforts and attention of our management team from our ordinary business operations. In connection with any SEC or DoJ investigation or any other investigation carried out by any other authority, there can be no assurance that we will not be required to pay penalties or provide other financial relief, or consent to injunctions or orders on future conduct or suffer other penalties, any of which could have a material adverse effect on us. See “Item 8. –Financial Information—Legal Proceedings.”



***Our methodology to estimate the overpayments incorrectly capitalized, uncovered in the context of the Lava Jato investigation, involves some degree of uncertainty. If substantive additional information comes to light in the future that would make our estimate for the overstatements of our assets appear, in retrospect, to have been materially underestimated or overestimated, this could require a restatement of our financial statements and may have a material adverse effect on our results of operations and financial condition and affect the market value of our securities.***

As a result of the findings of the Lava Jato investigation, in the third quarter of 2014, we wrote off US\$2,527 million of capitalized costs representing amounts that Petrobras overpaid for the acquisition of property, plant and equipment in prior years.

Beginning in 2014, and over the course of 2015, the Brazilian Federal Prosecutor's Office focused part of its investigation on irregularities involving our contractors and suppliers and uncovered a broad payment scheme that involved a wide range of participants, including former Petrobras personnel. Based on the information available to us, the payment scheme involved a group of companies that, between 2004 and April 2012, colluded to obtain contracts with us, overcharging us under those contracts and using the overpayment received under the contracts to fund improper payments to political parties, elected officials or other public officials, individual contractor personnel, former Petrobras personnel and other individuals involved in the payment scheme. In addition to the payment scheme, the investigations identified several specific instances of other contractors and suppliers that allegedly overcharged Petrobras and used the overpayment received from their contracts with us to fund improper payments, unrelated to the payment scheme, to certain former Petrobras personnel. See Note 3 to our audited consolidated financial statements for further information about the Lava Jato investigation, the overpayments charged by certain contractors and suppliers to Petrobras and our methodology to estimate the overstatement of our assets.

We concluded that a portion of our costs incurred to build property, plant and equipment that resulted from contractors and suppliers in the cartel overcharging us to make improper payments should not have been capitalized in our historical costs of property, plant and equipment. As it is impracticable to identify the specific periods and amounts for the overpayments made by us, we considered all the available information to determine the impact of the overpayments charged to us. As a result, to account for these overpayments, we developed a methodology to estimate the aggregate amount that we overpaid under the payment scheme, in order to determine the amount of the write-off representing the overstatement of our assets resulting from overpayments used to fund improper payments.

The Lava Jato investigation is still ongoing and it could be a significant amount of time before the Brazilian federal prosecutors conclude their investigation. As a result of this investigation, substantive additional information might come to light in the future that would make our estimate for overpayments appear, in retrospect, to have been materially low or high, which may require us to restate our financial statements to further adjust the write-offs representing the overstatement of our assets recognized in our interim consolidated financial statements for the nine-month period ended September 30, 2014.

We believe that we have used the most appropriate methodology and assumptions to determine the amounts of overpayments incorrectly capitalized based on the information available to us, but our estimation methodology involves some degree of uncertainty. There can be no assurance that the write-offs representing the overstatement of our assets, determined using our estimation methodology, and recognized in our interim consolidated financial statements for the nine-month period ended September 30, 2014, are not underestimated or overestimated. In the event that we are required to write-off additional historical costs from our property, plant and equipment or to reverse write-offs previously recognized in our financial statements, this might impact the total value of our assets and we may be subject to negative publicity, credit rating downgrades, or other negative material events, which may have a material adverse effect on our results of operations and financial condition and affect the market value of our securities.

## **Risks Relating to Our Relationship with the Brazilian Federal Government**

***The Brazilian federal government, as our controlling shareholder, may pursue certain macroeconomic and social objectives through us that may have a material adverse effect on us.***

As our controlling shareholder, the Brazilian federal government may pursue certain of its macroeconomic and social objectives through us. Brazilian law requires that the Brazilian federal government own a majority of our voting stock, and so long as it does, the Brazilian federal 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 federal government rather than to our own economic and business objectives.

Accordingly, we may make investments, incur costs and engage in sales with parties or on terms that may have an adverse effect on our results of operations and financial condition. In particular, we continue to assist the Brazilian federal government in ensuring that the supply and pricing of crude oil and oil products in Brazil meets Brazilian consumption requirements. Prior to January 2002, prices for crude oil and oil products were regulated by the Brazilian federal government, occasionally set below prices prevailing in the world oil markets. We cannot assure you that price controls will not be reinstated in Brazil.

***Our investment budget is subject to approval by the Brazilian federal government, and failure to obtain approval of our planned investments could adversely affect our results of operations and financial condition.***

The Brazilian federal government maintains control over our investment 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 MPBM and the MME. Following review by these governmental authorities, the Brazilian Congress must approve our budget. Our approved budget may reduce or alter our proposed investments and incurrence of new debt, and we may be unable to obtain financing that does not require Brazilian federal government approval. As a result, we may not be able 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, which may adversely affect our results of operations and financial condition.

## **Risks Relating to Brazil**

***Brazilian political and economic conditions and investor perception of these conditions have a direct impact on our business and our access to capital, and may have a material adverse effect on us.***

The Brazilian federal 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 federal government's response to these factors:

- exchange rate movements and volatility;
- inflation;
- financing of government fiscal deficits;
- price instability;
- interest rates;
- liquidity of domestic capital and lending markets;

Table of Contents

- tax policy;
- regulatory policy for the oil and gas industry, including pricing policy;
- allegations of corruption against political parties, elected officials or other public officials, including allegations made in relation to the Lava Jato investigation; and
- other political, diplomatic, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian federal government will implement changes in policy or regulations that may affect any of the factors mentioned above or other factors in the future may lead to economic uncertainty in Brazil and increase the volatility of the Brazilian securities market and securities issued abroad by Brazilian companies, which may have a material adverse effect on our results of operations and financial condition.

Historically, the country's political scenario has influenced the performance of the Brazilian economy and political crises have affected the confidence of investors and the general public, which resulted in economic downturn and heightened volatility in the securities issued abroad by Brazilian companies. Currently, Brazilian markets are experiencing heightened volatility attributable to (i) Brazil's loss of its investment-grade credit rating, (ii) political uncertainty and instability (as result of, among other factors, the ongoing impeachment proceeding against the President of Brazil) and (iii) the uncertainties derived from the ongoing Lava Jato investigation and its impacts on the Brazilian economy and political environment. Although Brazilian authorities have publicly described Petrobras as a victim of the alleged illegal conduct identified during the Lava Jato investigation, at this stage of the investigation, any developments in the Lava Jato investigation (foreseeable and unforeseeable) could have a material adverse effect on the Brazilian economy and on our results of operations and financial condition.

Additionally, since 2011, Brazil has been experiencing an economic slowdown culminating in a Gross Domestic Product, or GDP, decrease of 3.8% in 2015. GDP growth rates were, 0.1% in 2014, 2.7% in 2013, 1.8% in 2012 and 3.9% in 2011. Our results of operations and financial condition have been, and will continue to be, affected by the growth rate of GDP in Brazil because a substantial portion of our oil products are sold in Brazil. We cannot ensure that GDP will increase or remain stable in the future. Future developments in the Brazilian economy may affect Brazil's growth rates and, consequently, the consumption of our oil products. As a result, these developments could impair our results of operations and financial condition.

***Allegations of political corruption against the Brazilian federal government and the Brazilian legislative branch could create economic and political instability.***

In the past, members of the Brazilian federal government and the Brazilian legislative branch have faced allegations of political corruption. As a result, a number of politicians, including senior federal officials and congressmen, resigned or have been arrested. Currently, elected

officials and other public officials in Brazil are being investigated for allegations of unethical and illegal conduct identified during the Lava Jato investigation being conducted by the Office of the Brazilian Federal Prosecutor. The potential outcome of these investigations is unknown, but they have already had an adverse impact on the image and reputation of the implicated companies (including Petrobras), in addition to the adverse impact on general market perception of the Brazilian economy. These proceedings, their conclusions or further allegations of illicit conduct could have additional adverse effects on the Brazilian economy. We cannot predict whether such allegations will lead to further instability or whether new allegations against Brazilian government officials will arise in the future. In addition, we cannot predict the outcome of any such allegations nor their effect on the Brazilian economy.

***Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty in Brazil, and may have a material adverse effect on us.***

Brazil has historically experienced high rates of inflation, particularly prior to 1995. Inflation, as well as government efforts to combat inflation, had significant negative effects on the Brazilian economy. More recently, inflation rates were 10.67% in 2015, 6.41% in 2014 and 5.91% in 2013, as measured by the IPCA, the National Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*), compiled by IBGE (Brazilian Institute of Geography and Statistics).

Brazil may experience high levels of inflation in the future. The Brazilian government may introduce policies to reduce inflationary pressures, which could have the effect of reducing the overall performance of the Brazilian economy. Some of these policies may have an effect on our ability to access foreign capital or reduce our ability to execute our future business and management plans, particularly for those projects that rely on foreign partners.

The Brazilian government's measures to control inflation have often included maintaining a tight monetary policy with high real interest rates. These policies have contributed to limiting the size and attractiveness of the local debt markets, requiring borrowers like us to seek foreign currency funding in the international capital markets. To the extent that there is economic uncertainty in Brazil, which weakens our ability to obtain external financing on favorable terms, the local Brazilian market may be insufficient to meet our financing needs, which in turn may have a material adverse effect on us.

**Risks Relating to Our Equity and Debt Securities**

***The size, volatility, liquidity or regulation of the Brazilian securities markets may curb the ability of holders of ADSs to sell the common or preferred shares underlying our ADSs.***

Petrobras shares are among the most liquid traded on the São Paulo Stock Exchange, or BM&FBOVESPA, but overall, the Brazilian securities markets are smaller, more volatile and less liquid than the major securities markets in the United States and other jurisdictions, and may be regulated differently from the way in which U.S. investors are accustomed. Factors that may specifically affect the Brazilian equity markets may limit the ability of holders of ADSs to sell the common or preferred shares underlying our ADSs at the price and time they desire.

***The market for PGF's debt securities may not be liquid.***

Some of PGF's notes are not listed on any securities exchange and are not quoted through an automated quotation system. Most of PGF's notes are currently listed both on the New York Stock Exchange and the Luxembourg Stock Exchange and trade on the NYSE Euronext and

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncer

Euro MTF market, respectively, although most trading in PGF's notes occurs over-the-counter. PGF can issue new notes that can be listed in markets other than the New York Stock Exchange and the Luxembourg Stock Exchange and traded in markets other than the NYSE Euronext and the Euro MTF market. We can make no assurance as to the liquidity of or trading markets for PGF's notes. We cannot guarantee that the holders of PGF's notes will be able to sell their notes in the future. If a market for PGF's notes does not develop, holders of PGF's notes may not be able to resell the notes for an extended period of time, if at all.



***Holders of our ADSs may be unable to exercise preemptive rights with respect to the common or preferred shares underlying the ADSs.***

Holders of ADSs who 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 Securities Act is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the common or preferred shares relating to these preemptive rights, and therefore we may not file any such registration statement. If a registration statement is not filed and an exemption from registration does not exist, The Bank of New York Mellon, as depositary, will attempt to sell the preemptive rights, and holders of ADSs 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 Incorporation—Preemptive Rights.”

***If holders of our ADSs exchange their ADSs for common or preferred shares, they risk losing the ability to timely 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. Such remittances under an ADR program are subject to a specific tax treatment in Brazil that may be more favorable to a foreign investor if compared to remitting gains originated from securities directly acquired by the investor in the Brazilian regulated stock markets. Therefore, an investor who opts to exchange ADSs for the underlying common or preferred share may be subject to less favorable tax treatment on gains with respect to these investments.

The conversion of ADSs directly into ownership of the underlying common or preferred shares is governed by CMN Resolution No. 4,373 and foreign investors who intend to do so are required to appoint a representative in Brazil for the purposes of Annex I of CMN Resolution No. 4,373, who will be in charge for keeping and updating the investors’ certificates of registrations with the Central Bank of Brazil, which entitles registered foreign investors to buy and sell directly on the BM&FBOVESPA. Such arrangements may require additional expenses from the foreign investor. Moreover, if such representatives fail to obtain or update the relevant certificates of registration, investors may incur in additional expenses or be subject to operational delays which could affect their ability to receive dividends or distributions relating to the common or preferred shares or the return of their capital in a timely manner.

The custodian’s certificate of registration or any foreign capital registration directly obtained by such holders may be affected by future legislative or regulatory changes, and we cannot assure such holders that additional restrictions applicable to them, the disposition of the underlying common or preferred shares, or the repatriation of the proceeds from the process

Inflation, and the Brazilian government’s measures to combat inflation, may contribute significantly to economic un

will not be imposed in the future.

***Holders of our ADSs may face difficulties in protecting their interests.***

Our corporate affairs are governed by our bylaws and Brazilian Corporate Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States or elsewhere outside Brazil. In addition, the rights of an ADS holder, which are derivative of the rights of holders of our common or preferred shares, as the case may be, to protect their interests against actions by our board of directors are different under Brazilian Corporate Law than under the laws of other jurisdictions. Rules against insider trading and self-dealing and the preservation of shareholder interests may also be different in Brazil than in the United States. In addition, the structure of a class action in Brazil is different from that in the US, and under Brazilian law, shareholders in Brazilian companies do not have standing to bring a class action, and under Petrobras's by-laws must, generally with respect to disputes concerning rules regarding the operation of the capital markets, arbitrate any such disputes. See Item 10. "Additional Information—Memorandum and Articles of Incorporation—Dispute Resolution."

We are a state-controlled 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 holders of ADSs 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, holders of ADSs may face greater difficulties in protecting their 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.

***Holders of our ADSs do not have the same voting rights as our shareholders. In addition, holders of ADSs representing preferred shares do not have voting rights.***

Holders of our ADSs do not have the same voting rights as holders of our shares. Holders of our ADSs are entitled to the contractual rights set forth for their benefit under the deposit agreements. ADS holders exercise voting rights by providing instructions to the depository, as opposed to attending shareholders meetings or voting by other means available to shareholders. In practice, the ability of a holder of ADSs to instruct the depository as to voting will depend on the timing and procedures for providing instructions to the depository, either directly or through the holder's custodian and clearing system.

In addition, a portion of our ADSs represents our preferred shares. Under Brazilian law and our bylaws, holders of preferred shares do not have the right to vote in shareholders' meetings. This means, among other things, that holders of ADSs representing preferred shares are not entitled to vote on important corporate transactions or decisions. See Item 10. "Additional Information—Memorandum and Articles of Incorporation—Voting Rights."

***We would be required to pay judgments of Brazilian courts enforcing our obligations under the guaranty relating to PGF's notes only in reais.***

If proceedings were brought in Brazil seeking to enforce our obligations in respect of the guaranty relating to PGF's notes, we would be required to discharge our obligations only in *reais*. Under Brazilian exchange controls, 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 guaranty executed by us was a fraudulent conveyance could result in PGF noteholders losing their legal claim against us.***

PGF's obligation to make payments on the PGF notes is supported by our obligation under the corresponding guaranty. We have been advised by our external U.S. counsel that the guaranty 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 that the laws of Brazil do not prevent the guaranty 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 guaranty, and we, at the time we entered into the relevant guaranty:

- were or are insolvent or rendered insolvent by reason of our entry into such guaranty;
- 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 believe 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 guaranty could be avoided, or claims with respect to that agreement could be subordinated to the claims of other creditors. Among other things, a legal challenge to the guaranty on fraudulent conveyance grounds may focus on the benefits, if any, realized by us as a result of the issuance of the PGF notes. To the extent that the guaranty is held to be a fraudulent conveyance or unenforceable for any other reason, the holders of the PGF notes would not have a claim against us under the relevant guaranty and would solely have a claim against PGF. We cannot ensure that, after providing for all prior claims, there will be sufficient assets to satisfy the claims of the PGF noteholders relating to any avoided portion of the guaranty.

***Holders resident in the European Union may not receive payment of gross-up amounts for withholding pursuant to the European Council Directive 2014/107 on the taxation of savings income.***

Austria has opted out of certain exchange of information provisions of the European Council Directive 2003/48/EC on the taxation of savings income (which opt out has been confirmed by current applicable European Council Directive 2014/107 (the Directive) after repeal of Directive 2003/48/EC) and is instead, during a transitional period, applying a withholding tax on payments of interest, at a rate of up to 35%, made by a paying agent within Austria to, or collected by such a paying agent for, an individual beneficial owner resident in other member states of the European Union (EU Member States) or to certain limited types of entities established in other Member States unless the beneficial owner of the interest

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

payments opts for exchange of information as required under the Directive. Neither we nor the paying agent (nor any other person) would be required to pay additional amounts in respect of the notes as a result of the imposition of such withholding tax by Austria. For more information, see Item 10. "Additional Information—Taxation Relating to PGF's Notes—European Union Council Directive 2014/107." An investor should consult a tax adviser to determine the tax consequences of holding PGF's notes for such investor.

## **Item 4. Information on the Company**

### **History and Development**

Petróleo Brasileiro S.A.—Petrobras was incorporated in 1953 as the exclusive agent to conduct the Brazilian federal government’s hydrocarbon activities. We began operations in 1954 and since then have been carrying out crude oil and natural gas production and refining activities in Brazil on behalf of the government. As of December 31, 2015, the Brazilian federal government owned 28.67% of our outstanding capital stock and 50.26% of our voting shares. See Item 7. “Major Shareholders and Related Party Transactions—Major Shareholders. Our common and preferred shares have been traded on the BM&FBOVESPA since 1968 and on the NYSE in the form of ADSs since 2000.

We lost our exclusive right to carry out oil and gas activities in Brazil when the Brazilian Congress amended the Brazilian Constitution, and subsequently passed Law No. 9,478/1997 in 1997. Enacted as part of a comprehensive reform of the oil and gas regulatory system, this law authorized the Brazilian federal government to contract with any state or privately-owned company to carry out all activities related to oil, natural gas and their respective products. This new law established a concession-based regulatory framework, ended our exclusive right to carry out oil and gas activities, and allowed open competition in all aspects of the oil and gas industry in Brazil. The law also created an independent regulatory agency, the ANP, to regulate the oil, natural gas and renewable fuel industry in Brazil and to create a competitive environment in the oil and gas sector. See Item 4. “Information on the Company—Regulation of the Oil and Gas Industry in Brazil—Price Regulation.”

Following the discovery of large pre-salt reservoirs offshore Brazil, Congress passed in 2010 additional laws intended to regulate exploration and production activities in the pre-salt area, as well as other potentially strategic areas not already under concession. Under these new laws, we acquired from the Brazilian federal government through an Assignment Agreement the right to explore and produce up to five bnboe of oil, natural gas and other fluid hydrocarbons in specified pre-salt areas. Additionally, on December 2, 2013, based on these laws enacted in 2010, we executed our first agreement with the Brazilian federal government under a production sharing regime for the Libra field. Under the law governing production sharing regime for the pre-salt area, we are currently required to be operator, with a minimum 30% participation. See Item 4. “Information on the Company—Regulation of the Oil and Gas Industry in Brazil”, Item 10. “Additional Information—Material Contracts—Assignment Agreement” and Item 10. “Additional Information—Material Contracts—Production Sharing Agreement.”

We operate through subsidiaries, joint ventures, joint operations and associated companies established in Brazil and many other countries. Our principal executive office is located at Avenida República do Chile 65, 20031-912 Rio de Janeiro, RJ, Brazil, our telephone number is (55-21) 3224-4477 and our web-site is [www.petrobras.com.br](http://www.petrobras.com.br). The information on our

Inflation, and the Brazilian government’s measures to combat inflation, may contribute significantly to economic uncertainty.

website, which might be accessible through a hyperlink resulting from this URL, is not and shall not be deemed to be incorporated into this annual report.

## **Overview of the Group**

We are one of the world's largest integrated oil and gas companies, operating principally in Brazil where we are the dominant participant. As a result of our legacy as Brazil's former sole producer and supplier of crude oil and oil products and our strong and continuous commitment to find and develop oil fields in Brazil, we have a large base of proved reserves and operate and produce most of Brazil's oil and gas production. In 2015, our average domestic daily oil production was 2,128 mbb/d, which represents more than 90% of Brazil's total oil production. Most of our domestic proved reserves are located in the adjacent offshore Campos and Santos Basins in southeast Brazil. Their proximity allows us to optimize our infrastructure and limit our costs of development and production for our new discoveries. Additionally, we have developed special expertise in deep water exploration and production from 47 years of developing Brazil's offshore basins. We are applying the technical expertise we gained through developing the Campos Basin to the Santos Basin, which is expected to be the principal source of our future growth in proved reserves and oil production.



Table of Contents

As of December 31, 2015, we had proved developed oil and gas reserves of 5,161.7 mmbbl and proved undeveloped reserves of 4,988.9 mmbbl in Brazil. The development of this large reserve base and the exploration of pre-salt areas has demanded, and will continue to demand, significant investments and the growth of our operations.

We operate substantially all of the refining capacity in Brazil. Most of our refineries are located in southeastern Brazil, within the country's most populated and industrialized markets and adjacent to the source of most of our crude oil in the Campos Basin. Our current domestic crude distillation capacity is 2,176 mmbbl/d and our domestic refining throughput in 2015 was 1,976 mmbbl/d. We meet the demand for oil products in Brazil through a planned combination of oil products imports and domestic refining of crude oil, which seeks to optimize our margins, taking advantage of price differentials existing between the cost to refine crude oil in Brazil and the cost to import oil products. We are also involved in the production of petrochemicals. We distribute oil products through our own retail network and to wholesalers.

We participate in most aspects of the Brazilian natural gas market, including the logistics and processing of natural gas. To meet our domestic demand, we process natural gas derived from our onshore and offshore (mainly from fields in the Campos, Espírito Santo and Santos Basins) production, import natural gas from Bolivia, and to the extent necessary, import LNG through our regasification terminals. We also participate in the domestic power market primarily through our investments in gas-fired thermoelectric power plants and in renewable energy. In addition, we participate in the fertilizer business, which is another important natural gas market.

Outside of Brazil, we operate in 12 countries. In Latin America, our operations extend from exploration and production to refining, marketing, retail services, natural gas and electricity power plants. In North America, we produce oil and gas and have refining operations in the United States. In Africa, through a joint venture, we produce oil in Nigeria and have oil and gas exploration in other countries.

Comprehensive information and tables on reserves and production is presented at the end of Item 4. See "Information on the Company—Additional Reserves and Production Information."

In the fourth quarter of 2015, we changed our reportable business segments to reflect the reallocation of our international activities into the business segment to which the underlying activities correspond, thus reducing our reportable business segments from six to five. Our activities are currently organized into five business segments:

- **Exploration and Production:** this business segment covers exploration, development and production of crude oil, NGL (natural gas liquid) and natural gas in Brazil and abroad, for the primary purpose of supplying our domestic refineries and the sale of surplus crude oil and oil products produced in our natural gas processing plants to the domestic and foreign markets. Our exploration and production segment also operates through partnerships with other companies;

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

- **Refining, Transportation and Marketing:** this business segment covers refining, logistics, transportation and trading of crude oil and oil products in Brazil and abroad, exporting of ethanol, extraction and processing of shale, as well as holding equity interest in petrochemical companies in Brazil;
- **Gas and Power:** this business segment covers transportation, trading of natural gas produced in Brazil and abroad, imported natural gas, transportation and trading of LNG (liquid natural gas), generation and trading of electricity, as well as holding equity interest in (i) transporters and distributors of natural gas and (ii) thermoelectric power plants in Brazil, in addition to being responsible for our fertilizer business;

Table of Contents

- **Distribution:** this business segment covers activities of Petrobras Distribuidora S.A., which operates through its own retail network and wholesale channels to sell oil products, ethanol and vehicle natural gas in Brazil to retail, commercial and industrial customers, as well as other fuel wholesalers. This segment also includes distribution of oil products operations abroad (South America); and
- **Biofuel:** this business segment covers production of biodiesel and its co-products, as well as ethanol-related activities such as equity investments, production and trading of ethanol, sugar and the surplus electric power generated from sugarcane bagasse.

Additionally, we have a Corporate segment that has activities that are not attributed to the other segments, notably those related to corporate financial management, corporate overhead and other expenses, including actuarial expenses related to the pension and medical benefits for retired employees and their dependents. For further information regarding our business segments, see Note 4.2. to our audited consolidated financial statements.

The following table sets forth key information for each business segment in 2015:

	<b>Key Information by Business Segment, 2015</b>						
	<b>Exploration and Production</b>	<b>Refining, Transportation and Marketing</b>	<b>Gas and Power</b>	<b>Biofuel</b>	<b>Distribution</b>	<b>Corporate</b>	<b>Eliminations</b>
	<b>(US\$ million)</b>						
Revenues	35,680	74,321	13,145	229	33,406	–	(59,400)
Expenses (s) before income taxes	(3,683)	8,459	518	(317)	(219)	(14,961)	–
Assets at December 31	123,796	45,492	19,469	482	5,271	39,455	(3,400)
Expenditures and investments	19,131	2,534	793	43	255	302	–

As part of our 2015-2019 Plan, we also announced a divestment program in order to improve operating efficiencies, returns on capital, and generate additional cash to service our debt. This divestment program contemplates the sale of minority, majority or entire positions in certain of our subsidiaries, affiliates, and assets to strategic or financial investors or through public offerings. Based on our internal valuation of assets that are considered for sale pursuant to the divestment program for the period 2015-2016, we expect to receive proceeds of approximately US\$15.1 billion. During 2015, we received proceeds from the sale of assets under our divestment program amounting to approximately US\$700 million, mainly resulting from the sale of (i) a 49% interest in Petrobras Gás S.A. (Gaspetro) to Mitsui Gás e Energia do Brasil Ltda. – Mitsui and (ii) all of our exploration and production assets in the Austral Basin, in Argentina to Compañía General de Combustibles S.A, among others.

Recently, our board of directors has approved changes to our organizational structure and our governance and management model, which resulted in the elimination of 43% of all management functions in non-operational units, which we expect will lead to cost savings

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

amounting to R\$1.8 billion (US\$443 million) per year. This new model seeks to align our management and structure to our 2015-2019 Plan and our current business environment, promote cost savings and strengthen compliance and internal controls processes. It also involves the integration of activities among our business and corporate segments, and the combination of areas to enhance accountability for business results.

**Exploration and Production**

	<b>Exploration and Production Key Statistics</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
Exploration and Production:			
Sales revenues	35,680	68,611	72,345
Income (loss) before income taxes	(3,683)	21,850	31,812
Property, plant and equipment	109,724	140,582	133,309
Capital expenditures and investments	19,131	25,500	29,692

Our oil and gas exploration and production activities are the largest components of our investment portfolio. In 2015, our oil and gas worldwide production averaged 2,576 mboe/d, a 3.3% increase compared to the previous year (2,493 mboe/d) and our oil worldwide production averaged 2,228 mbb/d, a 3.6% increase compared to the previous year (2,150 mbb/d).

According to SEC technical criteria for booking proved reserves, as of December 31, 2015, our worldwide net proved oil, condensate and natural gas reserves, including synthetic oil and gas, was 10.5 bnboe, a 20% reduction compared to our proved reserves of 13.1 bnboe as of December 31, 2014. This reduction was mainly attributable to the drop in oil prices during the fiscal year of 2015.

Within Brazil, our activities are concentrated in deep water oil reservoirs. Our domestic activities represented 93% of our worldwide production in 2015 and accounted for 97% of our worldwide reserves as of December 31, 2015. Over the last five years, approximately 90% of our total Brazilian oil equivalent production has been oil, and the remainder natural gas. In 2015, we installed two additional offshore units, and connected 73 new wells (47 production and 26 injection wells) in our production systems.

Brazil's richest oil fields are located offshore, most of them in deep waters. We have been conducting offshore exploration and production activities in these waters since 1971, when we started exploration in the Campos Basin, and our major discoveries were made in deep and ultra-deep waters. Our technology and expertise have created a competitive advantage for us and we have become globally recognized as innovators in the technology required to explore and produce hydrocarbons in deep and ultra-deep waters. In 2015, offshore production accounted for 91% of our production in Brazil and deep-water production accounted for 80% of our production in Brazil. According to production data from PFC Energy, we operate more production (on a boe basis) from fields in deep and ultra-deep water than any other company.

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

Historically, we focused our offshore exploration and production activities on sandstone turbidite reservoirs, located primarily in the Campos Basin. In 2006, we were successful in drilling through a massive salt layer off the Brazilian coast that stretches from the Campos to the Santos Basin. The oil that was formed prior to the formation of the salt layer was trapped and well preserved in a number of large carbonate reservoirs (which we refer to as the pre-salt reservoirs), leading to a number of important discoveries. This pre-salt province occupies an area of approximately 149,000 km<sup>2</sup> (36.8 million acres), of which we have rights to produce from 17% of the total area (around 25,600 km<sup>2</sup> or 6.3 million acres), through acreage assigned to us under Concession Agreements, the Assignment Agreement and a Production Sharing Agreement.

The pre-salt reservoirs we have discovered are located in ultra-deep waters at total depths of up to 7,000 meters (22,965 feet). The southern part of the pre-salt province consists of the Santos Basin, where the salt layer is approximately two kilometers thick. In the northern part of the pre-salt province, the salt is thinner and much of the oil has migrated through the salt to the post-salt sandstone reservoirs of the Campos Basin. While some of the oil that formed has migrated, we still have made important discoveries in pre-salt reservoirs in the Campos Basin, as we drilled through the salt layers. Most of our current and future capital will be committed to developing the oil found in the pre-salt province, with an emphasis on the Santos Basin, given the size of its reservoirs and their potential.

Table of Contents

The map below shows the location of our pre-salt reservoirs:

Outside Brazil, we have long been active in South America, Gulf of Mexico and West Africa. We focus on opportunities to leverage the deep water expertise we have developed in Brazil. Since 2012, we have been substantially reducing our international activities through the sale

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

of assets to meet our announced divestment targets.



## **Our activities by region**

### *Activities in Brazil*

#### *Exploration and Production Regimes*

We have historically conducted exploration, development and production activities in Brazil through concession agreements, which we have obtained through participation in bid rounds conducted by the ANP. Some of our existing concessions were granted by the ANP without an auction in 1998, as provided by Law No. 9,478/1997. These are known as the “Round Zero” concession agreements. Since then, except for the 13<sup>th</sup>. bid round held on October 2015, we have participated in all of the auction rounds conducted by the ANP, including the first production-sharing regime auction round held on October 21, 2013.

Currently, we operate under three different exploration and production regimes:

- **Concession Agreements:** ANP grants rights, from time to time, through public auctions open to qualified operators, to explore and produce crude oil and gas reserves in Brazil under concession agreements for the blocks offered in each auction. These concession agreements have a term of 27 years following the declaration of commerciality, with the possibility of extension by the ANP. In 2016, the Brazilian federal government authorized the ANP to permit the extension of the terms of Round Zero concession agreements for up to an additional 27 years. These negotiations are currently on going.
- **Assignment Agreement (*Contrato de Cessão Onerosa*):** On September 3, 2010, we entered into an agreement with the Brazilian federal government, under which it assigned to us the right to conduct activities for the exploration and production of oil, natural gas and other fluid hydrocarbons in specified pre-salt areas. The agreement is subject to a maximum production of five bnboe over 40 years (extendable for five additional years), and we have already declared commerciality for this entire volume in the areas of Franco (Búzios), Sul de Tupi (Sul de Lula), Florim (Itapu), Nordeste de Tupi (Sépia), Sul de Guará (Sul de Sapinhoá) and Entorno de Iara (Norte de Berbigão, Sul de Berbigão, Norte de Sururu, Sul de Sururu and Atapu). See Item 10. “Additional Information—Material Contracts—Assignment Agreement.”
- **Production Sharing Agreement (*Contrato de Partilha de Produção*):** Under this regime, exploration and production licenses are awarded through a public auction to the consortium that offers the highest share of profit oil to the government and Petrobras must currently be the operator and have at least a 30% participation in the block awarded under this regime. At a public auction held on October 21, 2013, a consortium including Petrobras was awarded the rights and obligations to operate and explore a strategic pre-salt block (known as Libra – which has an estimated recoverable volume of between 8 and 12 bnboe according to the ANP) located in the Santos Basin. On December 2, 2013, we executed the first agreement under this regime. We have a 40% interest in the Libra block and are its exclusive operator. This agreement has a term of 35 years. Although a 2014 CNPE Resolution would permit the Brazilian federal government to enter into a production sharing agreement

Inflation, and the Brazilian government’s measures to combat inflation, may contribute significantly to economic un

with Petrobras to produce volumes of oil, natural gas and fluid hydrocarbons in excess of the maximum production originally agreed for certain designated areas under the Assignment Agreement, the TCU has suspended such negotiations for the time being pending completion of the negotiation of all parameters for the revision process under the Assignment Agreement. See Item 10. "Additional Information—Material Contracts—Assignment Agreement—Additional Production in the Assignment Agreement Areas."

Table of Contents

The following map shows our exploration and production areas in Brazil as of December 2015.

*Production activities in Brazil*

The table below reflects our production by our principal basins in Brazil:

<b>Production</b>	<b>Oil (m bbl/d)</b>			<b>Gas (mmcf/d)</b>			<b>Total (mboe/d)</b>			<b>Stationary production units</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Brazil</b>	<b>2,128</b>	<b>2,034</b>	<b>1,931</b>	<b>1,544</b>	<b>1,500</b>	<b>1,406</b>	<b>2,386</b>	<b>2,284</b>	<b>2,166</b>	<b>120</b>	<b>122</b>	<b>126</b>
Campos Basin	1,488	1,526	1,531	577	548	554	1,584	1,617	1,623	56	56	56
Santos Basin	395	247	137	487	413	281	477	316	184	12	11	11

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

Other Basins	245	262	263	479	539	571	325	352	359	52	55	59
--------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	----	----

Our domestic oil production in 2015 averaged 2,128 mmbbl/d in 2015 and was 4.6% higher than our average production in 2014. Our total domestic production, including our natural gas output that grew by 2.9% over the year before, averaged 2.386 mmboe/d in 2015. This growth represents a 4.4% increase compared to the 2.284mmboe/d average recorded in 2014. For 2016, we expect to produce 2,145 mbbbl/d of oil in Brazil (0.8% above our average in 2015), as a result of three new unit start-ups (FPSO Cidade de Maricá, FPSO Cidade de Saquarema and FPSO Cidade de Caraguatatuba) and the continuing ramp-up of recently installed systems.

Table of Contents

Pre-salt production will gradually become a larger share of our total production, as new production units dedicated to pre-salt reservoirs located in the Santos Basin are brought on-stream. Our operated production from pre-salt reservoirs averaged 767 mbb/d in 2015, as compared to an average of 491 mbb/d operated during 2014. Our highest daily pre-salt operated production ever occurred on December 14, 2015, when total production reached 942 mbb/d of oil. This record production occurred with only 48 producing wells. Of these wells, 25 are located in the Santos Basin and were responsible for 71% of that production (666 mbb/d). Post-salt reservoirs are already largely developed, and the focus now for these reservoirs will be to minimize the natural decline.

Since 2013, we have installed several major systems in the pre-salt area of the Santos Basin and in the Campos Basin, which helped mitigate the basin's natural decline. In 2015, we installed the FPSO Cidade de Itaguaí in the Iracema area of Lula field, and the P-61 TLWP. The table below presents the units that have most contributed to the growth of our production in Brazil since 2013:

<b>Start Up (year)</b>	<b>Basin</b>	<b>Field/Area</b>	<b>Unit Type</b>	<b>Production Unit</b>	<b>Crude Oil Nominal Capacity (bb/d)</b>	<b>Natural Gas Nominal Capacity (mmcf/d)</b>	<b>Water Depth (meters)</b>	<b>Notes</b>	
2016	Santos	Lula Alto	FPSO	Cidade de Maricá	150,000	211.9	2,100	Pre-salt	
2015	Santos	Lula	FPSO	Cidade de Itaguaí	150,000	282.5	2,240	Pre-salt	
2015	Campos	Papa-Terra	Module 1	TLWP	P-61	—	—	1,180	Post-salt
2014	Campos	Roncador	Module 4	FPSO	P-62	180,000	211.9	1,600	Post-Salt
2014	Campos	Parque das Baleias	FPSO	P-58	180,000	211.9	1,399	Both	
2014	Santos	Iracema Sul	FPSO	Cid. de Mangaratiba	150,000	282.5	2,220	Pre-salt	
2014	Santos	Sapinhoá Norte	FPSO	Cidade de Ihabela	150,000	211.9	2,140	Pre-salt	
2013	Campos	Roncador	Module 3	SS	P-55	180,000	211.9	1,795	Post-salt
2013	Campos	Papa-Terra	Module 2	FPSO	P-63	140,000	35.3	1,200	Post-salt
2013	Santos	Sapinhoá	FPSO	Cidade de São Paulo	120,000	176.6	2,140	Pre-salt	
2013	Santos	Lula NE	FPSO	Cidade de Paraty	120,000	176.6	2,140	Pre-salt	
2013	Santos	Baúna	FPSO	Cidade de Itajaí	80,000	70.6	275	Post-salt	

---

(1)

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

Production from the P-61 TLWP is processed by the FPSO P-63 in the Papa-Terra field.

We recognized impairment losses for the fiscal year ended December 31, 2015 of US\$8.7 billion with respect to our domestic exploration and production producing properties due to the impact of the decline in international crude oil prices on the price assumptions for certain of our domestic crude oil and natural gas producing properties, including Papa-Terra, Centro Sul group, Uruguá group, Espadarte, among others, the use of a higher discount rate (reflecting an increase in Brazil's risk premium), as well as the geological revision of Papa-Terra reservoir. We have also recognized impairment losses for the fiscal year ended December 31, 2015 of US\$0.5 billion with respect to oil and gas production and drilling equipment, unrelated to producing properties in Brazil. These impairment losses are mainly related to the idle capacity of two drilling rigs in the future and to the use of a higher discount rate (reflecting an increase in Brazil's risk premium). For further information, see Note 14 to our audited consolidated financial statements.

For the fiscal year ended December 31, 2014, we previously recognized impairment losses of US\$1.6 billion with respect to our domestic exploration and production operations due to the impact of the decline in international crude oil prices on the price assumptions for certain of our crude oil and natural gas producing properties located in Brazil, including Frade, Pirapitanga, Tambuatá, Carapicu and Piracucá. We also previously recognized impairment losses for the fiscal year ended December 31, 2014 of US\$536 million with respect to oil and gas production and drilling equipment located in Brazil, unrelated to crude oil and natural gas producing properties.

Table of Contents*Systems to be installed by 2018*

We currently have 11 major systems to be installed by 2018 and one major system has been installed in 2016 (FPSO Cidade de Maricá). The Lula and Búzios fields will be particularly important to support our production growth. Production from these fields will be brought online through 7 FPSOs. We will also install a new post salt unit in the Tartaruga Verde Field by 2017. The table below lists our upcoming system start-ups:

<b>Projected Start Up (year)</b>	<b>Basin</b>	<b>Field/Area</b>	<b>Unit Type</b>	<b>Crude Oil Nominal Capacity (bbl/d)</b>	<b>Natural Gas Nominal Capacity (mmcf/d)</b>	<b>Water Depth (meters)</b>	<b>E&amp;P Regime</b>
2016	Santos	Lula Central	FPSO	150,000	211.9	2,100	Pre-salt Concession
2016	Santos	Lapa	FPSO	100,000	176.6	2,100	Pre-salt Concession
2017	Santos	Lula Sul	FPSO	150,000	211.9	2,100	Pre-salt Concession
2017	Santos	Lula Extremo Sul	FPSO	150,000	211.9	2,100	Pre-salt Concession
2017	Campos	Tartaruga Verde	FPSO	150,000	176,6	765	Post-salt Concession
2018	Santos	Búzios 1	FPSO	150,000	247.2	2,100	Assignment Agreement
2018	Santos	Búzios 2	FPSO	150,000	247.2	2,100	Assignment Agreement
2018	Santos	Búzios 3	FPSO	150,000	247.2	2,100	Assignment Agreement
2018	Santos	Berbigão	FPSO	150,000	211.9	2,100	Pre-salt Concession
2018	Santos	Atapu Sul	FPSO	150,000	211.9	2,100	Assignment Agreement
2018	Santos	Lula Norte	FPSO	150,000	211.9	2,100	Pre-salt Concession

*Primary Domestic Basins in which Petrobras Has Activities**Campos Basin*

The Campos Basin, which covers approximately 115,000 km<sup>2</sup> (28.4 million acres), continues to be our largest oil and gas basin in Brazil in terms of proved hydrocarbon reserves and annual production. Since we began exploring this area in 1971, over 60 hydrocarbon accumulations

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

have been discovered, including eight large oil fields in deep and ultra-deep waters.

As of December 31, 2015, 56% and 36% of our total proved crude oil and natural gas reserves in Brazil, respectively, came from the Campos Basin. During 2015, 66% of our total domestic production came from Campos. During 2015, we operated 56 stationary production units in water depths from 80 to 1,886 meters (262 to 6,188 feet) in the Campos Basin. The average API gravity of the oil in the Campos Basin is 23.2°.

Our activities in the basin began in 1971 and we are now focused on maintaining our production in relatively mature fields. We have been able to mitigate the natural decline of this basin by installing new production systems, tapping pre-salt reservoirs with both new and existing production units and improving operational efficiency. Pre-salt production has become an important factor in maintaining Campos Basin production. We first began pre-salt oil production in 2008 in the Jubarte field located in the Parque das Baleias region. In 2015, the Campos Basin pre-salt area average production of oil we operated was 243 mbb/d, which represents an increase of 8.5% compared to 2014. Virtually all of our production in the Campos Basin is pursuant to concession agreements. See “—Regulation of the Oil and Gas Industry in Brazil.”

During 2015, production in the Campos Basin was supported by the ramp up of the P-55 and P-62 units in the Roncador Field and the Papa Terra Modules, as well as production maintenance projects in our mature fields:

- The new units in Roncador (our largest single producing field on average in 2015) enabled the field to record its highest ever volume of more than 400 mbb/d in July 2015.
- Recently we installed a major platform in this basin, the P-58, which operates in the Parque das Baleias area. This unit produces both pre-salt and post-salt reservoirs and it has increased its production from 54 mbb/d in 2014 to 93 mbb/d in 2015.



Table of Contents

- Due to increased maintenance efforts, annual output from the Marlim field in the Campos Basin, which did not have any new units installed in the last three years, has remained steady at a level of almost 200 mbbbl/d during the last three years.

As we have now largely developed the Campos Basin, the 2015-2019 Plan projects only one new unit for the Campos Basin, the Tartaruga Verde FPSO currently under construction with 150,000 bbl/d (176MMcf gas) of capacity and scheduled to initiate production in 2017.

### *Santos Basin*

The Santos Basin, which covers approximately 348,900 km<sup>2</sup> (86 million acres) and is located adjacent to and southwest of the Campos Basin, is one of the most promising offshore exploration and production areas in the world. Our first discovery in the Santos Basin was in 1979 in the Merluza field. Since the discovery of the pre-salt fields in 2006, we have increased our focus on producing from the pre-salt. Since first production in 2009, monthly oil operated production from the Santos Basin pre-salt area has grown to 614 mbbbl/d by year-end 2015 (which represents an increase of 51% compared to December 2014).

As of December 31, 2015, 38% and 48% of our total proved crude oil and natural gas reserves in Brazil, respectively, came from the Santos Basin. During 2015, 20% of our total domestic production came from the Santos Basin. During 2015, we operated 12 floating production systems in water depths generally exceeding 2,000 meters (6,188 feet). The average API gravity of the oil in the Santos Basin is 30.7°.

Our activities in the Santos Basin increased with the acquisition of eight blocks through public auction under concession agreements in 2000 and 2001. In 2010, we entered into the Assignment Agreement with the Brazilian federal government, under which we were granted exclusive rights to explore and produce five billion boe in six pre-salt blocks in the Santos Basin. In 2013, a consortium led by Petrobras (with 40% interest and acting as exclusive operator of the area), Shell (20% interest), Total (20% interest), CNODC (10% interest) and CNOOC (10% interest) were awarded the Libra block in the ultra-deep waters of the Santos Basin under the first production-sharing regime auction ever held in Brazil. Today all of our pre-salt Santos Basin production is being produced pursuant to the concession agreements. We expect that the first units subject to the terms of the Assignment Agreement will begin production next year, while production under the production sharing regime (excluding EWT's and pilot systems) is still in the planning stage.

Over the last five years, we have substantially reduced the cost of pre-salt development projects. These cost reductions have largely occurred in well construction, which represents approximately 55% of total development costs. Up to 2010, the time required to drill and complete a well averaged more than 310 days, while in 2015 we reduced that average time to 129 days. In addition, due to the high productivity of the wells, we have been able to reach full capacity of the platforms with fewer wells, and in doing so, the total investments required have decreased.

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

During 2015, production growth in the Santos Basis was supported by the ramp up of FPSO Cidade de Mangaratiba, which achieved first oil production in late 2014. The early start-up of the FPSO Cidade de Itaguaí in July of 2015 also contributed to production growth during the year. In August 2015, the Lula Field became the largest producing field in Brazil.

### *Other Basins*

In Brazil, we also produce from another 9 basins: Alagoas, Camamu, Ceará, Espírito Santo, Potiguar, Reconcavo, Sergipe, Solimões e Tucano Sul. In 2015, those basins produced in total an average of 325 mboe/d and as of December 31, 2015, had proved crude oil and natural gas reserves of 0.825 bnboe.

Table of Contents**Activities Abroad***Production*

Oil production abroad averaged 99.2 mbb/d in 2015, a 14.4% decrease from the 115.9 mbb/d recorded in 2014, primarily due to the conclusion of asset sales in Colombia and Peru in 2014 and in Argentina in March 2015. The impact of the sales of these operations was partially offset by the start-up of production in the Saint Malo and Lucius fields in the United States in December 2014 and January 2015, respectively. Gas production abroad averaged 543.0 mmcf/d in 2015, a 3.1% decrease from the 560.3 mmcf/d recorded in the previous year.

Our average production per region as of December 31, 2015, December 31, 2014 and December 31, 2013 is summarized in the table below:

	Oil (mbbl/d)			Gas (mmcf/d)			Total (mboe/d)		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
<b>International Production</b>									
South America (excluding Brazil)	38.6	57.3	70.9	474.9	545.9	532.0	117.8	148.3	159.6
North America	30.6	27.3	11.8	67.2	12.8	12.1	41.8	29.5	13.9
Africa	0.0	0.0	26.4	—	—	—	0.0	0.0	26.4
<b>Total International</b>	<b>69.2</b>	<b>84.7</b>	<b>109.1</b>	<b>542.1</b>	<b>558.7</b>	<b>544.1</b>	<b>159.6</b>	<b>177.8</b>	<b>199.9</b>
<b>Equity and non-consolidated affiliates:</b>									
South America (excluding Brazil)	3.4	4.6	5.5	0.9	1.6	1.7	3.5	4.9	5.7
Africa	26.6	26.6	13.9	0.0	0.0	0.0	26.6	26.6	13.9
<b>Worldwide production (except Brazil)</b>	<b>99.2</b>	<b>115.9</b>	<b>128.5</b>	<b>543.0</b>	<b>560.3</b>	<b>545.8</b>	<b>189.7</b>	<b>209.3</b>	<b>219.5</b>

For the fiscal year ended December 31, 2015, we have recognized impairment losses of US\$0.6 billion with respect to our international exploration and production operations. These impairment losses were in the Cascade and Chinook fields, located in the United States (US\$0.43 billion) and in San Alberto, San Antonio, Itau and Colpa Caranda fields, located in Bolívia (US\$0.17 billion). For further information, see Note 14 to our audited consolidated financial statements. For the fiscal year ended December 31, 2014, we previously recognized impairment losses of US\$1.7 billion with respect to our international exploration and production operations. These impairment losses were mainly in the Cascade and Chinook fields, located in the United States (US\$1.6 billion).

**Activities Abroad by Region***South America*

Inflation, and the Brazilian government's measures to combat inflation, may contribute significantly to economic uncertainty.

We conduct exploration and production activities in Argentina, Bolivia, Colombia and Venezuela.

- In **Argentina**: We participate across the energy value chain, primarily through our 67.2% interest in Petrobras Argentina S.A., or PESA. Our oil production is concentrated in the Medanito and Entre Lomas fields in the Neuquén Basin and the El Tordillo fields in the Golfo de San Jorge Basin, and our gas production is concentrated in the El Mangrullo, Río Neuquén and Sierra Chata fields in the Neuquén Basin.
- In **Bolivia**, our oil and gas production comes principally from the San Alberto and San Antonio fields, which are operated mainly to supply gas to Brazil and Bolivia.
- In **Colombia**, our portfolio includes the Tayrona offshore exploration block and the Villarica Norte onshore exploration block.
- In **Venezuela**, through PESA, we hold minority interests in four joint ventures with subsidiaries of Petróleos de Venezuela S.A., or PDVSA, which hold production rights. PDVSA is the majority holder and operator.

Table of Contents*North America*

- In the **United States**, we focus on deep water fields in the Gulf of Mexico. Our production in the United States during 2015 originated mainly from the Cascade, Chinook, Saint Malo, Lucius, Hadrian South and Cottonwood fields. The Cascade and Chinook development project were the first in the Gulf of Mexico to use an FPSO.
- In **Mexico**, we have held non-risk service contracts through our joint venture with PTD Servicios Multiplos SRL for the Cuervito and Fronterizo onshore blocks in the Burgos Basin since 2003. Under these service contracts, we receive fees for our services, but any production is transferred to the Mexican national oil company Petróleos Mexicanos.

*Africa*

We explore oil and gas opportunities in Africa exclusively through our 50% interest in a joint venture with BTG Pactual E&P BV (a subsidiary of Banco BTG Pactual S.A.), Petrobras Oil & Gas (PO&G). The assets of our joint venture with BTG Pactual E&P BV include:

- In **Gabon**, the Ntsina Marin and Mbeli Marin offshore blocks, which are in an exploratory phase;
- In **Nigeria**, the Agbami and Akpo fields, which are both producing oil. PO&G also has a 16% interest in the Egina field project, currently in its development stage while the Preowei and Egina South discoveries are under appraisal; and
- In **Tanzania**, PO&G has initiated the relinquishing process for the remaining Block 8 following an exploratory phase that revealed dry results.

**Reserves**

According to SEC technical criteria for booking proved reserves, as of December 31, 2015, our worldwide net proved oil, condensate and natural gas reserves, including synthetic oil and gas, reached 10,516 mmboe, a 20% reduction compared to our proved reserves of 13,141 mmboe as of December 31, 2014. This reduction was mainly attributable to the drop in oil prices during the fiscal year of 2015 and production-driven natural depletion of oil fields.

Our worldwide proved reserves as of December 31, 2015, December 31, 2014 and December 31, 2013 are summarized in the table below:

Proved Reserves (SEC criteria)(1)	Oil (mmbbl)			Gas (bcf)			Total (mmboe)		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
<b>Brazil</b>	8,551.1	10,858.8	10,667.2	9,597.0	11,180.9	11,303.5	10,150.6	12,722.2	12,551.1
Campos Basin	4,778.8	7,202.8	7,642.3	3,407.5	4,578.4	4,662.4	5,346.7	7,965.9	8,419.4
Santos Basin	3,216.0	2,917.4	2,209.8	4,579.7	4,339.7	3,935.4	3,979.3	3,640.7	2,865.7

Other Basins	556.3	738.6	815.1	1,609.8	2,262.8	2,705.7	824.6	1,115.7	1,266.0
<b>Other S. America</b>	66.9	84.6	187.3	697.4	758.3	1,099.8	183.1	211.0	370.6
<b>North America</b>	90.6	120.1	123.2	138.5	180.0	133.0	113.7	150.1	145.4
<b>Africa</b>	65.8	54.1	63.2	16.6	19.3	20.6	68.6	57.3	66.7
<b>Total</b>	<b>8,774.4</b>	<b>11,117.6</b>	<b>11,040.9</b>	<b>10,449.5</b>	<b>12,138.5</b>	<b>12,556.9</b>	<b>10,515.9</b>	<b>13,140.6</b>	<b>13,133.8</b>

---

(1) These figures include synthetic oil and gas.

Table of Contents

There has been a net decrease of 2,625 mmbœ in our proved reserves in 2015 mainly as a result of revisions of previous estimates. See “—Additional Reserves and Production Information—Changes in Proved Reserves” for further information about changes in our proved reserves. The table below summarizes the changes in our reserves in the last three years, expressed in millions of barrels of oil equivalent, including synthetic oil and gas.

<b>Proved reserves (SEC criteria)(mmbœ)</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Proved reserves, beginning of year</b>	<b>13,141</b>	<b>13,134</b>	<b>12,895</b>
Discoveries and extensions	494	316	1,050
Improved recovery	22	2	277
Revisions of previous estimates	(2,186)	718	(109)
Sales of proved reserves	(22)	(163)	(118)
Purchases of proved reserves	0	31	0
Production	(932)	(898)	(862)
<b>Proved Reserves, end of year</b>	<b>10,516</b>	<b>13,141</b>	<b>13,134</b>

**Our reserves-to-production ratio was 11.3 years worldwide and 11.5 years in Brazil and the ratio between our developed and total proved reserves was 51.1% as of December 31, 2015.**

### **Capital Expenditures**

In 2015, due to the recent decline of international crude oil prices and the depreciation of the *real* against the U.S. dollar, as well as our revised 2015-2019 Plan, we decreased capital expenditures in exploration and production activities and shifted our focus from exploration to the development of projects that are already underway in the Santos pre-salt area.

Our US\$19.1 billion capital expenditures in exploration and production activities in 2015 (in Brazil and abroad) represent a US\$6.4 billion decrease when compared to capital expenditures amounting to US\$25.5 billion for the fiscal year ended December 31, 2014 and a US\$10.6 billion decrease when compared to US\$29.7 billion for the fiscal year ended December 31, 2013, mainly attributable to a reduction of exploration activities, projects optimization and the depreciation of the *real* against the U.S. dollar. Brazil represented 94% of our exploration and production investments in 2015.

## **Exploration**

As of December 31, 2015, we had 43 evaluation plans underway, including 40 in exploratory areas and three in ring fence areas. We are exclusively responsible for conducting exploration activities under 68 exploratory agreements. In the Campos Basin, our exploration efforts focus on the pre-salt level. In the Santos Basin, the Libra Consortium has achieved significant progress in the exploration of the Libra block, with recent developments pointing to a 300-meter column of 28° API grade oil in the sixth well drilled in the Northeast area of the Libra Field.

In 2015, in addition to the relevant oil discoveries in the Libra block, we also had successful results in the Sergipe Offshore Basin - thus confirming its potential - and in the El Mangrullo field, on the Neuquina Basin in Argentina. We also declared the commerciality of Sépia Leste in the Santos Basin and the Jandaia Sul Field, onshore in the Reconcavo Basin.

As of December 31, 2015, we had exploration partnerships with 19 foreign and domestic companies, on 74 exploratory agreements, in 43 of which we are the operator. We hold interest ranging from 30% to 100% in the exploration areas under concession or assigned to us.



Table of Contents

In 2015, we invested a total of US\$2.3 billion in exploration activities.

	Net Exploratory Area (km <sup>2</sup> )			Exploratory Blocks			Evaluation Plans			Wells Drilled		
	2015	2014	2013	2015	2014	2013	2015	2014	2013	2015	2014	2013
<b>Brazil</b>	<b>55,366</b>	<b>63,789</b>	<b>54,210</b>	<b>146</b>	<b>158</b>	<b>96</b>	<b>43</b>	<b>46</b>	<b>51</b>	<b>51</b>	<b>74</b>	<b>76</b>
Campos Basin	1,798	3,398	4,493	7	8	5	9	9	7	4	10	5
Santos Basin	3,378	6,322	11,952	6	9	8	5	8	11	5	8	12
Other Basins	50,190	54,069	37,765	133	141	83	29	48	33	42	56	59
<b>Other S. America North America Africa Total</b>	<b>12,702</b>	<b>12,702</b>	<b>44,337</b>	<b>7</b>	<b>7</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>5</b>
	<b>787</b>	<b>1,877</b>	<b>1,886</b>	<b>52</b>	<b>110</b>	<b>112</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>
	<b>3,679</b>	<b>6,057</b>	<b>9,583</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>
	<b>72,534</b>	<b>84,425</b>	<b>110,016</b>	<b>208</b>	<b>281</b>	<b>232</b>	<b>46</b>	<b>49</b>	<b>54</b>	<b>59</b>	<b>88</b>	<b>83</b>

## **Critical Resources in Exploration and Production**

We seek to develop and retain the critical resources that are necessary to meet our production targets. Drilling rigs are an important resource for our exploration and production operations and substantial lead-time is required in fleet expansion. When we discovered the pre-salt reservoirs, in 2006, our activities as operators were constrained by a lack of rigs. Whereas in 2008 we only had three rigs capable of drilling in waters with depth greater than 2,000 meters (6,560 feet), we expanded our fleet to 40 rigs by 2013. Due to the reduction in the time needed to complete pre-salt wells and to project optimization leading to the need of fewer wells, we are now able to reduce our rig fleet.

As of December 31, 2015, there were 18 onshore and 46 offshore rig platforms in our fleet, of which 30 units operated in ultra-deep waters in Brazil. Reductions in our rig platform fleet are expected due to the experience and knowledge we acquired with respect to drilling operations and to the postponement of certain projects.

We are also substantially reducing both our mid-water fleet (from 1,000 to 1,999 meters) and the number of our onshore rigs, since our projects in these areas have been largely completed. Reduced exploration activities will further reduce our need for floating drilling rigs.

### **Drilling Units in Use in Brazil by Exploration and Production on December 31 of Each Year**

	2015		2014		2013	
	Leased	Owned	Leased	Owned	Leased	Owned
<b>Onshore</b>	<b>10</b>	<b>8</b>	<b>16</b>	<b>10</b>	<b>12</b>	<b>10</b>
	<b>40</b>	<b>6</b>	<b>55</b>	<b>6</b>	<b>61</b>	<b>7</b>

**Offshore, by water depth (WD)**

Jack-up rigs	—	2	—	2	—	3
Floating rigs:	40	4	55	4	61	4
500 to 999 meters WD	2	2	2	2	4	2
1000 to 1999 meters WD	8	2	14	2	17	2
2000 to 3200 meters WD	30	0	39	—	40	—

**Drilling Units in Use outside Brazil by Exploration and Production on December 31 of Each Year**

	2015		2014		2013	
	Leased	Owned	Leased	Owned	Leased	Owned
<b>Onshore</b>	<b>8</b>	—	<b>6</b>	—	<b>7</b>	—
<b>Offshore, by water depth (WD)</b>	<b>1</b>	—	<b>2</b>	—	<b>2</b>	—
Jack-up rigs	—	—	—	—	—	—
Floating rigs:	—	—	—	—	—	—
500 to 999 meters WD	—	—	—	—	—	—
1000 to 1999 meters WD	—	—	—	—	—	—
2000 to 3200 meters WD	1	—	2	—	2	—

In order to achieve our production goals, we must secure a number of specialized vessels to connect wells to production systems. In 2015, specialized vessels were sufficient to meet our needs.

**Refining, Transportation and Marketing****Refining, Transportation and Marketing Key Statistics**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
<b>Refining, Transportation and Marketing:</b>			
Sales revenues	74,321	114,431	114,331
Income (loss) before income taxes	8,459	(23,527)	(12,413)
Property, plant and equipment	33,032	50,273	67,297
Capital expenditures and investments	2,534	7,882	14,399

We are one of the world's largest refiners. We own and operate 13 refineries in Brazil, with a total net crude distillation capacity of 2,176 mbb/d. As of December 31, 2015, we operated substantially all of Brazil's total refining capacity. We supplied almost all of the refined product needs of third-party wholesalers, exporters and petrochemical companies, in addition to the needs of our Distribution segment. We operate a large and complex infrastructure of pipelines, terminals and a shipping fleet to transport oil products and crude oil to domestic and export markets. Most of our refineries are located near our crude oil pipelines, storage facilities, refined product pipelines and major petrochemical facilities, facilitating access to crude oil supplies and end-users.

Our Refining, Transportation and Marketing segment also includes (i) petrochemical operations that add value to the hydrocarbons we produce, (ii) extraction and processing of shale and (iii) international refining activities.

**Refining Capacity in Brazil**

Our crude distillation capacity in Brazil as of December 31, 2015, was 2,176 mbb/d and our average throughput during 2015 was 1,976 mbb/d. We have also gradually increased the production of low sulfur diesel, from 144 mbb/d in 2014 to 201 mbb/d in 2015, meeting the market demand for a more environmentally friendly transportation fuel.

The following table shows the installed capacity of our Brazilian refineries as of December 31, 2015, and the average daily throughputs of our refineries in Brazil in 2015, 2014 and 2013.

**Capacity and Average Throughput of Refineries**

<b>Name (Alternative Name)</b>	<b>Location</b>	<b>Average Throughput*</b>
--------------------------------	-----------------	----------------------------

		<b>Crude Distillation Capacity at December 31, 2015 (mmbbl/d)</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
LUBNOR	Fortaleza (CE)	8	8	9	8
RECAP (Capuava)	Capuava (SP)	53	40	54	53
	Duque de				
REDUC (Duque de Caxias)	Caxias (RJ)	239	235	271	282
REFAP (Alberto Pasqualini)	Canoas (RS)	201	174	192	197
REGAP (Gabriel Passos)	Betim (MG)	157	152	158	150
REMAN (Isaac Sabbá)	Manaus (AM)	46	38	44	42
REPAR (Presidente Getúlio Vargas)	Araucária (PR)	208	197	204	194
REPLAN (Paulínia)	Paulinia (SP)	415	391	408	421
	São Jose dos				
REVAP (Henrique Lage)	Campos (SP)	252	249	262	234
RLAM (Landulpho Alves)	Mataripe (BA)	315	248	287	279
RPBC (Presidente Bernardes)	Cubatão (SP)	170	157	177	177
RPCC (Potiguar Clara Camarão)	Guamaré (RN)	38	34	38	37
RNEST (Abreu e Lima)	Ipojuca (PE)	74	53	3	—
Average crude oil throughput		2,176	1,936	2,065	2,029
Average NGL throughput		—	40	41	45
Average throughput		2,176	1,976	2,106	2,074

---

\* Considers oil and NGLs processing (fresh feedstock)

### *Refinery Investments*

We initiated the construction of two new refineries - Abreu e Lima Refinery – RNEST in northeastern Brazil and Petrochemical Complex of Rio de Janeiro (Complexo Petroquímico do Rio de Janeiro – Comperj) to process our domestically produced heavy oil for oil products that were most in demand in the Brazilian market and for which there was a growing shortage.

The first refining unit of RNEST began producing oil products in December of 2014. Designed to process 115 mbb/d of crude oil into low sulfur diesel (10 ppm) and other products, this unit is currently operating with a partial capacity of 74 mbb/d. Reaching full capacity for the unit will require the completion of a sulfur emissions reduction unit (SNOX), which we expect will be completed in 2017. Construction of the second refining unit of RNEST, which will increase the refinery's capacity to 230 mbb/d, is expected to be completed by 2018, according to our 2015-2019 Plan.

With respect to Comperj, we are currently building a business model to restart the construction of this project, which includes partnerships with parties willing to fund and complete the construction of its first refining unit. Construction in the utilities center of the complex in order to support the start-up of its natural gas processing plant is ongoing.

We recognized impairment losses for the fiscal year ended December 31, 2015 of US\$1.35 billion with respect to Comperj due to the use of a higher discount rate (reflecting an increase in Brazil's risk premium) and the delay in expected future cash inflows resulting from the further postponement of the project. For further information, see Note 14 to our audited consolidated financial statements and Item 5. "Operating and Financial Review and Prospects—Critical Accounting Policies and Estimates—Impairment Testing of Refining Assets." We previously recognized impairment losses for the fiscal year ended December 31, 2014 of US\$11.7 billion with respect to Comperj and RNEST and of US\$129 million with respect to the Nansei Sekiyu K.K. refinery in Okinawa.

In addition to constructing new refineries, over the past ten years, we made substantial investments in our existing refineries to increase our capacity to economically process heavier Brazilian crude oil, improve the quality of our oil products to meet stricter regulatory standards, modernize our refineries, and reduce the environmental impact of our refining operations. These investments in our existing refineries have been largely completed.

As a result of either completing or temporarily suspending work on our refinery projects, our capital expenditures and investments in refining activities totaled US\$1.7 billion in 2015, as compared to capital expenditures and investments amounting to US\$6.3 billion for the fiscal year ended December 31, 2014 and US\$11.8 billion for the fiscal year ended December 31, 2013. Continued recent changes in our business model prompted a review of our future prospects and ultimately led to a reduction in the pace of our projected capital expenditures, which is reflected in our 2015-2019 Plan.



Table of Contents*Domestic Output of Oil Products and Domestic Sales Volumes*

The following tables summarize our domestic output of oil products and sales by product for the last three years.

<b>Domestic Output of Oil Products: Refining and marketing operations, mbb/d(1)</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Diesel	848	853	850
Gasoline	435	494	491
Fuel oil	250	286	255
Naphtha	78	85	90
LPG	127	130	137
Jet fuel	98	105	96
Others	190	217	206
<b>Total domestic output of oil products</b>	<b>2,026</b>	<b>2,170</b>	<b>2,124</b>
Installed capacity(2)	2,176	2,176	2,102
Crude distillation utilization (%)(3)	89	98	97
Domestic crude oil as % of total feedstock processed	86	82	82

- 
- (1) Output volumes are larger than throughput volumes as a result of gains during the refining process.
- (2) Installed capacity as of December 31, 2015, 2014 and 2013.
- (3) Crude distillation utilization considers average installed capacity as of December 31, 2015, 2014 and 2013.

Our total domestic output of oil products decreased to 2,026 mbb/d in 2015 from 2,170 mbb/d in 2014, as a result of lower demand for oil products in the domestic market and maintenance stoppages. In 2015, diesel represented 42% of our domestic output of oil products, as compared to 39% in 2014 and there was a higher participation of domestic crude oil in our total domestic feedstock processed (86% as compared to 82% in 2014.)

**Domestic Sales Volumes and Exports from Brazil, mbb/d**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Diesel	923	1,001	984
Gasoline	553	620	590
Fuel oil	104	119	98
Naphtha	133	163	171
LPG	232	235	231
Jet fuel	110	110	106
Others	179	210	203

Refining Capacity in Brazil

103

<b>Total oil products</b>	<b>2,234</b>	<b>2,458</b>	<b>2,383</b>
Ethanol, nitrogen fertilizers, renewables and other products	123	99	91
Natural gas	432	446	409
<b>Total domestic market</b>	<b>2,789</b>	<b>3,003</b>	<b>2,883</b>
Exports	510	393	395
<b>Total domestic market and exports</b>	<b>3,299</b>	<b>3,396</b>	<b>3,278</b>

The Brazilian domestic market grew rapidly from 2010 to 2012, in parallel with Brazil's economic expansion and the increase of average income, increasing by an average of 7.9% annually. In 2013 and 2014, as a result of the Brazilian economic slowdown, the domestic growth rate in consumption of oil products, particularly diesel, decreased as compared to the higher rates of growth experienced in prior years.

Our total domestic sales volumes for oil products were 2,234 mbb/d in 2015, a reduction of 9% compared to 2014. In 2015, our sales of oil products declined as a result of a 3.8% reduction in the Brazilian GDP, an increase in imports of diesel and gasoline from other participants in the Brazilian market, a reduction in the consumption of gasoline as a result of greater ethanol use, and a decrease in the sale of fuel oil due to decreased thermoelectric consumption.



Table of Contents*Imports and Exports*

Our import and export of oil products depend on our refinery output and Brazilian demand levels. Much of the crude oil we produce in Brazil is heavy or intermediate. We import some light crude to balance the slate for our refineries, and export heavy and intermediate crude oil from our production in Brazil. We also continue to import oil products to balance any shortfall between production from our Brazilian refineries and the market demand for each product, despite the domestic market retraction in 2015 and to take advantage of price differentials existing between the cost to refine crude oil in Brazil and the cost to import oil products.

We export oil products that our refineries produce in excess of Brazilian market demand, which is largely fuel oil.

The table below shows our exports and imports of crude oil and oil products in 2015, 2014 and 2013:

	<b>Exports and Imports of Crude Oil and Oil Products, mbb/d</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Exports</b>			
Crude oil	360	232	207
Fuel oil (including bunker fuel)	125	128	151
Gasoline	3	0	0
Others	21	30	35
<b>Total exports</b>	<b>509</b>	<b>390</b>	<b>393</b>
<b>Imports</b>			
Crude oil	277	392	404
Diesel	78	185	174
LPG	67	70	63
Gasoline	28	41	32
Naphtha	51	88	83
Others	32	29	37
<b>Total imports</b>	<b>533</b>	<b>805</b>	<b>793</b>

*Delivery Commitments*

We sell crude oil through long-term and spot-market contracts. Our long-term contracts specify the delivery of fixed and determinable quantities, subject to a price negotiation with third parties on a delivery-by-delivery basis. We are committed through long-term contracts to deliver a total of approximately 266 mbb/d of crude oil in 2016. We believe our domestic proved reserves will be sufficient to allow us to continue to deliver all contracted volumes. For 2016, approximately 30% of our domestic exported crude oil will be committed to meeting our contractual delivery commitments to third parties.

*Logistics and Infrastructure for Oil and Oil Products*

We own and operate an extensive network of crude oil and oil product pipelines in Brazil that connect our terminals, refineries and other primary distribution points. As of December 31, 2015, our onshore and offshore, crude oil and oil products pipelines extended over 7,517 km (4,670 miles). We operate 28 marine storage terminals and 21 other tank farms with nominal aggregate storage capacity of 67 mmbbl. Our marine terminals handle an average of 10,336 tankers and oil barges annually.

We operate a fleet of owned and chartered vessels. These provide shuttle services between our producing basins offshore Brazil and the Brazilian mainland, and shipping to other parts of South America and internationally. We are increasing our fleet of owned vessels to replace older vessels and decrease our dependency on chartered vessels. Upgrades will include replacing vessels nearing the end of their 25-year useful life. Our long-term strategy continues to focus on the flexibility afforded by operating a combination of owned and chartered vessels.

Table of Contents

Also, three new oil tankers and one LPG carrier were delivered to Transpetro in 2015. We plan to have another five vessels delivered to us during 2016 and up to 18 vessels in the following years, all of which will be built in Brazilian shipyards. In 2015, as a result of our 2015-2019 Plan, as well as issues with our counter-parties under many of the contracts for the construction or delivery of vessels, we canceled purchase contracts for the delivery of 10 additional vessels.

The table below shows our operating fleet and vessels under contract as of December 31, 2015.

**Owned and Chartered Vessels in Operation and Under Construction Contracts at December 31, 2015**

	In Operation		Under Contract/Construction	
	Number	Tons Deadweight Capacity	Number	Tons Deadweight Capacity
Owned fleet:				
Tankers	48	4,415,178	18	2,199,800
LPG tankers	6	40,732	5	21,300
Anchor Handling Tug Supply (AHTS)	1	1,920	—	—
<b>Total</b>	55	4,457,830	23	2,221,100
Chartered vessels:				
Tankers	105	11,238,426	—	—
LPG tankers	21	452,373	—	—
<b>Total</b>	126	11,690,799	—	—

A reduction in the number of chartered vessels in 2015 is mainly attributable to the significant reduction in imports of oil products. Despite this reduction in the number of chartered vessels, the volume of oil and oil products transported in 2015 was equivalent to the volume transported in 2014 due to the increase in oil exports, which use larger vessels.

### *Petrochemicals*

Our petrochemicals operations provide an outlet for our growing production volumes of gas and other refined products, which increase their value and provide substitute for products that are otherwise imported. Our strategy is to operate in an integrated manner with the other businesses of Petrobras, preferably through partnerships with other companies.



Table of Contents

We engage in our petrochemicals operations through the following subsidiaries, joint ventures, joint operations and associated companies:

	<b>mmt/y (nominal capacity) Petrobras interest (%)</b>	
<b>Braskem(1):</b>		
Ethylene	3.95	
Polyethylene	3.05	36.20
Polypropylene	3.99	
<b>DETEN Química S.A.:</b>		
LAB(1)	0.22	
LABSA(1)	0.12	27.88
<b>METANOR S.A./COPENOR S.A.(2):</b>		
Methanol	0.08	
Formaldehyde	0.09	34.54
Hexamine	0.01	
<b>FCC Fábrica Carioca de Catalisadores S.A.:</b>		
Catalysts	0.04	
Additives	0.01	50.00
<b>PETROQUÍMICASUAPE COMPLEX(3):</b>		
Purified Terephthalic Acid - PTA	0.70	
Polyethylene Terephthalate - PET	0.45	100.00
Polymer and polyester filament textiles	0.24	
<b>PETROCOQUE S.A.:</b>		
Calcined petroleum coke	0.50	50.00

(1) Feedstock for the production of biodegradable detergents.

(2) Copenor S.A. is a Metanor S.A. subsidiary.

(3) The PTA unit started operations in January 2013 and the PET unit started operations in August 2014.

Our investments in petrochemical companies amount to US\$850 million and the largest investment is in Braskem S.A. (Braskem), Brazil's largest petrochemical company.

We recognized impairment losses for the fiscal year ended December 31, 2015 of US\$200 million with respect to the Suape Petrochemical Complex (*Complexo Industrial Petroquímica Suape*) due to changes in market and price assumptions resulting from a decrease in economic activity in Brazil, a reduction in the spread for petrochemical products in the international market and the use of a higher discount rate (reflecting an increase in Brazil's risk premium). For further information, see Note 14 to our audited consolidated financial statements. We previously recognized impairment losses for the fiscal year ended December 31, 2014 of US\$1.1 billion with respect to the Suape Petrochemical Complex.



**Refining Capacity Abroad**

Our international crude distillation capacity as of December 31, 2015 was 230.5 mbb/d and the utilization factor for our international consolidated refining facilities was 58%.

The following table shows the installed capacity of our international refineries as of December 31, 2015, and the average daily throughputs in 2015, 2014 and 2013, respectively.

Name (Alternative Name)	Location	Crude Distillation Capacity at December 31, 2015 (mbbl/d)	Average Throughput*		
			2015	2014 (mbbl/d)	2013
Pasadena Refining System Inc.	Texas (USA)	100.0	99.5	100.3	101.8
Nansei Sekiyu Kabushiki Kaisha	Okinawa (JP)	100.0	10.2	35.9	38.6
Ricardo Eliçabe Refinery	Bahía Blanca (AR)	30.5	28.7	27.2	29.0
Total average crude oil throughput		230.5	132.8	158.9	160.8
Average external intermediate throughput		12.0	5.6	4.5	8.6
Total average throughput		242.5	138.4	163.4	169.4

\* Consider oil (fresh feedstock) and external processed intermediate oil products.

The following table shows the total average output of oil products of our international refineries in 2015, 2014 and 2013.

	International Average Output of Oil Products		
	2015	2014 (mbbl/d)	2013
Total average output	149	175	185

We also participate in the refining sector in other South American countries and in North America. See below our international refining activities by region:

### *South America*

We conduct refining and transportation activities in **Argentina** through our interest in PESA. We own the Bahia Blanca Refinery, with a capacity of 30.5 mbbbl/d, and own interests in the Refinor refinery in Campo Duran and in two petrochemical plants in Puerto General San Martín and Zárate.

### *North America*

In the **United States**, we own 100% of the Pasadena Refining System Inc., and 100% of its related trading company, PRSI Trading, LLC.

### *Asia*

In **Japan**, we own the Nansei Sekiyu Kabushiki Kaisha refinery in Okinawa. In first quarter of 2015, we decided to begin winding down the operations of this refinery and the refinery stopped processing crude oil in April 2015. This winding down plan involves continuing its activities as a maritime terminal. All stakeholders have been advised about this change in the business model, including local authorities.



Table of Contents*Sales Volumes Abroad*

	<b>Sales Volumes Abroad, mbb/d</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>International Sales</b>	546	<b>571</b>	<b>514</b>

**Distribution**

	<b>Distribution Key Statistics</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
		<b>(US\$ million)</b>	
<b>Distribution:</b>			
Sales revenues	33,406	46,893	45,244
Income (loss) before income taxes	(219)	860	1,411
Property, plant and equipment	1,868	2,685	2,790
Capital expenditures and investments	255	487	566

**Domestic Distribution**

We are Brazil's leading oil products distributor, operating through our own retail network, through our own wholesale channels, and by supplying other fuel wholesalers and retailers. Our Distribution segment sells oil products that are primarily produced by our Refining, Transportation and Marketing segment, or RTM, and works to expand the domestic market for these oil products and for other fuels, including LPG, natural gas, ethanol and biodiesel.

The primary focus of our Distribution segment is to be the benchmark in the distribution of oil products and biofuels in Brazil, by innovating and providing value to our business, while promoting safe operations and environmental and social responsibility, strengthening the Petrobras brand.

We supply and operate Petrobras Distribuidora, which accounts for 35.1% of the total Brazilian retail and wholesale distribution market. Petrobras Distribuidora distributes oil products, ethanol, biodiesel and natural gas to retail, commercial and industrial customers. In 2015, Petrobras Distribuidora sold the equivalent of 919.8 mbb/d of oil products and other fuels to wholesale and retail customers, of which the largest portion (39.9%) was diesel.

At December 31, 2015, our Petrobras Distribuidora branded service station network was Brazil's leading retail marketer, with 8,176 service stations, or 19.7% of the stations in Brazil. Petrobras Distribuidora owned and franchised stations that represented 27.6% of Brazil's retail sales of diesel, gasoline, ethanol, vehicular natural gas and lubricants in 2015.

Most Petrobras Distribuidora service stations are owned by franchisees that use the Petrobras Distribuidora brand name under license and purchase exclusively from us; we also provide franchisees with technical support, training and advertising. We own 632 of the Petrobras Distribuidora service stations and are required by law to subcontract the operation of these owned stations to third parties. We believe that our market share position is supported by a strong Petrobras Distribuidora brand image and by the remodeling of service stations and addition of lubrication centers and convenience stores.

Our wholesale distribution of oil products and biofuels under the Petrobras Distribuidora brand to commercial and industrial customers accounts for 53.8% of the total Brazilian wholesale market. Our customers include aviation, transportation and industrial companies, as well as utilities and government entities.

Table of Contents

Our LPG distribution business – Liquigas Distribuidora – held a 22.7% market share and ranked second in LPG sales in Brazil in 2015, according to the ANP.

***Distribution Abroad***

We also participate in the retail sector in other South American countries. See below our international distribution activities by region:

***South America***

We conduct distribution activities in Argentina, Chile, Colombia, Paraguay and Uruguay:

- In **Argentina**, through PESA, our operations include 265 retail service stations;
- In **Chile**, our operations include 279 service stations, the distribution and sales of fuel at airports and a lubricant plant;
- In **Colombia**, our operations include 115 service stations and a lubricant plant;
- In **Paraguay**, our operations include 180 service stations, the distribution and sales of fuel at three airports and an LPG refueling plant; and
- In **Uruguay**, we have downstream operations in the country, including 87 service stations and gas segment assets.

**Gas and Power****Gas and Power Key Statistics**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
		<b>(US\$ million)</b>	
<b>Gas and Power:</b>			
Sales revenues	13,145	18,373	14,572
Income (loss) before income taxes	518	(466)	991
Property, plant and equipment	14,674	22,237	21,011
Capital expenditures and investments	793	2,571	2,742

Refining Capacity in Brazil

115

Our Gas and Power segment comprises gas transmission and distribution, LNG regasification, the manufacture of nitrogen-based fertilizers, gas-fired and flex-fuel power generation, and power generation from renewable sources, including solar and wind sources.

The primary focus of our Gas and Power segment is to:

- Monetize our natural gas resources;
- Assure flexibility and reliability in the supply of natural gas;
- Consolidate our electric energy business, exploring synergies between our natural gas supply and power generation capacities, along with the expansion of our electric energy commercialization activities; and
- Chemically process our natural gas to increase its value, prioritizing nitrogen fertilizers and other value-added products.

**Domestic Gas and Power**

For more than two decades, we have actively worked to simultaneously develop Brazil's natural gas reserves and develop important infrastructure in order to assure flexibility and reliability in the supply of natural gas. As a result of this multi-year development program, we now have an integrated system centered around two main interlinked pipeline networks, a gas pipeline connection with Bolivia and an isolated pipeline in the northern region of Brazil (all together spanning over 9,190 km). This network allows us to deliver to our customers natural gas processed in our gas facilities arriving from our onshore and offshore natural gas producing fields, mainly from Santos, Campos and Espírito Santo Basins, as well as the natural gas from our three LNG terminals, and from Bolivia. As a result of our efforts to develop this market, natural gas in 2014 supplied 13.5% of Brazil's total energy needs, compared to 3.7% in 1998.

**Natural Gas**

Our principal markets for natural gas are:

- Industrial, commercial and retail customers;
- Thermoelectric generation; and
- Consumption by our refineries and fertilizer plants.

The table below shows the sources of our natural gas supply, our sales and internal consumption of natural gas, and revenues in our local gas distribution operations for each of the past three years.

<b>Supply and Sales of Natural Gas in Brazil, mmm<sup>3</sup>/d</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Sources of natural gas supply</b>			
Domestic production	44.9	43.2	40.8
Imported from Bolivia	32.1	32.9	30.5
LNG	18.0	20.0	14.5
Total natural gas supply	95.0	96.1	85.9
<b>Sales of natural gas</b>			
Sales to local gas distribution companies(1)	37.5	38.9	38.6
Sales to gas-fired power plants	31.1	31.6	26.0
Total sales of natural gas	68.6	70.5	64.6
<b>Internal consumption</b> (refineries, fertilizer and gas-fired power plants)(2)	26.4	25.6	21.3
<b>Revenues</b> (US\$ billion)(3)	8.3	9.8	9.0

- 
- (1) Includes sales to local gas distribution companies in which we have an equity interest.
  - (2) Includes gas used in the transport system.
  - (3) Includes natural gas sales revenues from the Natural Gas segment to other operating segments, service and other revenues from natural gas companies.

Our volume of natural gas sales to industrial, gas-fired electric power generation, commercial and retail customers in 2015 was 68.6 mmm<sup>3</sup>/d, representing a decrease of 2.7% compared to 2014. This decrease is attributable to the reduction of our industrial activities from 2014 to 2015. Natural gas consumption by refineries and fertilizer plants increased by 10%.

Table of Contents

Currently, our main focus is to provide transportation and processing solutions for our planned natural gas production from the pre-salt fields. In 2015, we invested US\$513.9 million in our natural gas infrastructure, and in 2016, we plan to continue to invest in (i) the construction of two gas offshore export pipelines connecting our pre-salt natural gas producing fields to the Cabiúnas Terminal and Comperj's processing plant; (ii) the expansion of the natural gas processing capacity of the Cabiúnas Terminal in order to process up to 459 mmcf/d (13 mmm<sup>3</sup>/d) with the expectation of increasing the associated natural gas production from the pre-salt reservoirs in the Santos Basin, and (iii) the development of a natural gas processing plant with a capacity of 742 mmcf/d (21 mmm<sup>3</sup>/d), located at the future Comperj's petrochemical complex, also associated with the pre-salt reservoirs in the Santos Basin. The Cabiúnas Terminal expansion became fully operational in March 2016 and Comperj's natural gas processing plant is scheduled to begin operations by 2019.

We also own and operate three LNG flexible terminals using three FSRUs (Floating Storage and Regasification Units), one in Guanabara Bay (State of Rio de Janeiro) with a send-out capacity of 706 mmcf/d (20 mmm<sup>3</sup>/d), another in Pecém (State of Ceará) in Northeastern Brazil with a send-out capacity of 247 mmcf/d (7 mmm<sup>3</sup>/d) and the last one located in the Todos os Santos Bay (State of Bahia), with a send-out capacity of 494 mmcf/d (14 mmm<sup>3</sup>/d).

In 2015, we received 79 liquid natural gas (LNG) cargos in Brazil, as compared to 99 in 2014.

We also own and operate four natural gas processing facilities. Two of them, Sul Capixaba and Cacimbas, located in the State of Espírito Santo, have the capacity to process 2.5 mmm<sup>3</sup>/d and 16 mmm<sup>3</sup>/d of natural gas, respectively, and are designated to process natural gas from the Campos Basin. Caraguatatuba plant, located in the State of São Paulo, has the capacity to process 20 mmm<sup>3</sup>/d of natural gas, and is designated to process natural gas from the Santos Basin post-salt and pre-salt areas. The TECAB plant, located in State of Rio de Janeiro, has the capacity to process 24 mmm<sup>3</sup>/d of natural gas from the Campos Basin and the Santos Basin pre-salt.

The map below shows our gas pipeline networks, LNG terminals and natural gas processing plants.

Through Gaspetro, we hold interests ranging from 23.5% to 100% in nineteen of twenty seven state natural gas distributors in Brazil. On December 28, 2015, we concluded the sale of a 49% interest in Gaspetro to Mitsui for R\$1.93 billion, approximately US\$495 million. See Note 10 to our audited consolidated financial statements.

The three most significant distributors in our portfolio (by volume) are CEG Rio, Bahiagás (both held through Gaspetro) and Petrobras Distribuidora (operating in the Espirito Santo state) and their combined averaged gas sales volumes in 2015 amounted to 17.514 mmm<sup>3</sup>/d, representing 54% of our averaged gas sales volumes during 2015.



*Long-Term Natural Gas Commitments*

When we began construction of the Bolivia-Brazil pipeline in 1996, we entered into a long-term Gas Supply Agreement, or GSA, with the Bolivian state-owned company Yacimientos Petroliferos Fiscales Bolivianos, or YPFB, to purchase certain minimum volumes of natural gas at prices linked to the international fuel oil price through 2019, after which the agreement may be extended until all contracted volume has been delivered.

Table of Contents

Our volume obligations under the ship-or-pay arrangements entered into with Gas Transboliviano S.A. (GTB) and Transportadora Brasileira Gasoduto Bolívia-Brasil S.A. (TBG) were generally designed to match our gas purchase obligations under the GSA through 2020. The tables below show our contractual commitments under these agreements for the five-year period from 2016 through 2020.

	2016	2017	2018	2019	2020
<b>Purchase commitments to YPFB</b>					
Volume obligation (mmm <sup>3</sup> /d)(1)	24.06	24.06	24.06	24.06	24.06
Volume obligation (mmcf/d)(1)	850.00	850.00	850.00	850.00	850.00
Brent crude oil projection (US\$)(2)	45.00	59.43	60.57	63.68	67.14
Estimated payments (US\$ million)(3)	1,037.70	1,185.14	1,407.65	1,505.76	1,605.96
<b>Ship-or-pay contract with GTB</b>					
Volume commitment (mmm <sup>3</sup> /d)	30.08	30.08	30.08	30.08	6.00
Volume commitment (mmcf/d)	1,062.26	1,062.26	1,062.26	1,062.26	211.89
Estimated payments (US\$ million)(5)	112.91	113.17	113.72	114.30	0
<b>Ship-or-pay contract with TBG</b>					
Volume commitment (mmm <sup>3</sup> /d)(4)	35.28	35.28	35.28	35.28	17.20
Volume commitment (mmcf/d)	1,246.09	1,246.09	1,246.09	1,246.09	607.50
Estimated payments (US\$ million)(5)	519	523	526	527	144

- 
- (1) 25.3% of contracted volume supplied by Petrobras Bolivia.
- (2) Brent crude oil price forecast based on our 2030 Strategic Plan, which is currently under review by our management.
- (3) Estimated payments are calculated using gas prices expected for each year based on our Brent crude oil price forecast. Gas prices may be adjusted in the future based on contract clauses and amounts of natural gas purchased by Petrobras may vary annually.
- (4) Includes ship-or-pay contracts relating to TBG's capacity increase.
- (5) Amounts calculated based on current prices defined in natural gas transport contracts.

### Natural Gas Sales Contracts

We sell our gas primarily to local gas distribution companies and to gas fired plants generally based on standard take-or-pay, long-term supply contracts. This represents 70% of our total sale volumes, and the price formulas under these contracts are mainly indexed to an international fuel oil basket. In order to restore the competitiveness of our natural gas in the Brazilian market, in 2015 we ceased discounting the prices we charge under some of our natural gas sales contracts. Additionally, we have a variety of sales contracts designed to create flexibility in matching customer demand with our gas supply capabilities. These include flexible and interruptible long-term gas sales contracts, auction mechanisms for

short-term contracts, weekly electronic auctions and a type of gas sales contract that consists of a seller delivery option that helps balance natural gas sales in case of low demand for natural gas from gas-fired power plants. In this circumstance, the excess natural gas volumes are offered to end consumers who ordinarily use energy sources other than natural gas.

In 2015, we continued to renegotiate some existing long-term natural gas sales contracts with local distribution companies of natural gas in order to promote adjustments tailored to specific market demands, encompassing term extensions for some contracts and prolonging our natural gas sales portfolio.

Table of Contents

The table below shows our future gas supply commitments from 2016 to 2020, including sales to both local gas distribution companies and gas-fired power plants:

<b>Future Commitments under Natural Gas Sales Contracts, mmm<sup>3</sup>/d</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>To local gas distribution companies:</b>					
Related parties(1)	17.92	18.05	18.27	18.85	16.88
Third parties	20.20	20.36	20.82	17.60	17.60
<b>To gas-fired power plants:</b>					
Related parties(1)	5.70	2.24	1.83	1.30	1.54
Third parties	11.32	10.48	10.26	10.11	10.15
<b>Total(2)</b>	<b>55.13</b>	<b>51.13</b>	<b>51.18</b>	<b>47.86</b>	<b>46.16</b>
Estimated amounts to be invoiced (US\$ billion)(3)(4)	4.6	4.7	4.7	4.4	4.2

- 
- (1) 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.
- (2) Estimated volumes are based on “take or pay” agreements in our contracts, expected volumes and contracts under negotiation (including renewals of existing contracts), not maximum sales.
- (3) Estimates are based on outside sales and do not include internal consumption or transfers.
- (4) Prices may be adjusted in the future and actual amounts may vary.

### Power

Brazilian electricity needs are mainly supplied by hydroelectric power plants (91,602 MW of installed capacity), which account for 65% of Brazil’s generation capacity. Hydroelectric power plants are dependent on the annual level of rainfall; in the years where rainfall is abundant, Brazilian hydroelectric power plants will generate more electricity and consequently less generation from thermoelectric power plants will be demanded. The total installed capacity of the Brazilian National Interconnected Power Grid (*Sistema Interligado Nacional*) in 2015 was 140,639 MW. Of this total, 6,148 MW (or 4%) was available from 20 thermoelectric plants we operate. These plants are designed to supplement power from the hydroelectric power plants.

In 2015, hydroelectric power plants in Brazil generated 43,591 MWavg, which corresponded to 68% of Brazil’s total electricity needs (63,966 MWavg). Hydroelectric generation capacity is supplemented by other sources of energy (wind, coal, nuclear, fuel oil, diesel oil, natural gas,

and others). Total electricity generated by these sources averaged 20,374 MW in 2015, of which our thermoelectric power plants contributed 4,646 MWavg, as compared to 4,761 MWavg in 2014 and 4,043 MWavg in 2013. In 2015, we invested US\$146.7 million in our power business segment.

### *Electricity Sales and Commitments for Future Generation Capacity*

Under Brazil's power pricing regime, a thermoelectric power plant may sell only electricity that is certified by the MME and which corresponds to a fraction of its installed capacity. This certificate is granted to ensure a constant sale of commercial capacity over the course of years to each power plant, given its role within Brazil's system to supplement hydroelectricity power during periods of unfavorable rainfall. The amount of certified capacity for each power plant is determined by its expected capacity to generate energy over time.

The total capacity certified by the MME (*garantia física*) may be sold through long-term contracts in auctions to power distribution companies (standby availability), sold through bilateral contracts executed with free customers and used to attend the energy needs of our own facilities.

In exchange for selling this certified capacity, the thermoelectric power plants shall produce energy whenever requested by the national operator (ONS). In addition to a capacity payment, thermoelectric power plants also receive from the Electric Energy Trading Chamber (*Câmara de Comercialização de Energia Elétrica*, or CCEE) reimbursement for its variable costs (previously declared to MME to calculate its commercial certified capacity) incurred whenever they are requested to generate electricity.

Table of Contents

In 2015, the commercial capacity certified by MME for all thermoelectric power plants controlled by us was 4,307 MWavg, although our total generating capacity was 6,148 MWavg. Of the total 4,554 MWavg of commercial capacity available (*capacidade comercial disponível* or *lastro*) for sale in 2015, approximately 69% was sold as standby availability in public auctions in the regulated market (compared to 53% in 2014) and approximately 30% was committed under bilateral contracts and self-production (i.e. sales to related parties) (compared to 35% in 2014).

In 2015, public auctions on the regulated market were the main channel used by our thermoelectric generation business to sell energy that had not been previously contracted. Distribution companies must purchase, through a public auction process on the regulated market, their expected electricity requirements for their captive customers. The public auction process is administered by ANEEL, either directly or through the *Câmara de Comercialização de Energia Elétrica* (Electric Energy Trading Chamber), or CCEE, under certain guidelines provided by the MME.

Existing power generators (such as our thermoelectric power plants) can hold auctions (i) in the year before the initial delivery date (“A-1 Auctions”), (ii) every year, for the delivery of energy for up to the following 15 years (“A Auctions”) and (iii) every year for the delivery of energy for up to the following 2 years (“Adjustment Auctions”). Electricity auctions for new generation projects are held (i) in the fifth year before the initial delivery date of electricity (“A-5 Auctions”), and (ii) in the third year before the commencement of commercial operation (“A-3 Auctions”).

To benefit from attractive sale prices for energy that has not been previously contracted, for the delivery of energy starting in 2014, we sold some of our remaining certified commercial capacity as standby capacity under public auctions on the electricity regulated market as follows: 574 MWavg per month in an A Auction held on April 30, 2014 for the sale of energy between May 1, 2014 to December 31, 2019. For the delivery of energy starting in 2015, we sold (i) 270 MWavg per month in an A-1 Auction held on December 5, 2014 for the sale of energy between January 1, 2015 to December 31, 2017 and (ii) 205 MWavg per month in the 18<sup>th</sup> Adjustment Auction held on January 15, 2015 for the sale of energy between January 1<sup>st</sup> to June 30, 2015. For the delivery of energy starting in 2016, we sold 114 MWavg per month in an A-1/2015 Auction, held on December 11, 2015 for the sale of energy between January 1, 2016, to December 31, 2016. With these sales, we can now better predict our revenues to be derived from the sale of electricity for the next 3 years.

Under the terms of standby availability contracts, we are paid a fixed amount whether or not we generate any power. Additionally, whenever we have to deliver energy under these contracts, we receive an additional payment for the energy delivered that is set on the auction date and is revised monthly or annually based on inflation-adjusted international fuel price indexes.

Our future commitments under bilateral contracts and self-production are of 1,317 MWavg in 2016, 1,232 MWavg in 2017 and 1,265 MWavg in 2018. The agreements expire gradually, with the last contract expiring in 2028. As existing bilateral contracts expire, we will sell our remaining certified commercial capacity under contracts in new auctions to be conducted by MME or through the execution of new bilateral contracts.

Table of Contents

The table below shows the evolution of our installed thermoelectric power plants' capacity, our purchases in the free market and the associated certificated commercial capacity.

	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Installed power capacity and utilization</b>			
Installed capacity (MW)	6,148	6,148	6,402
Certified commercial capacity (MWavg)	4,191	4,307	4,222
Purchases in the free market (MWavg)	335	247	320
Commercial capacity available ( <i>Lastro</i> ) (MWavg)	4,526	4,554	4,542

The table below shows the allocation of our sales volume between our customers and our revenues for each of the past three years:

	<b>Volumes of Electricity Sold (MWavg)</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Total sale commitments</b>	<b>4,451</b>	<b>4,036</b>	<b>4,235</b>
Bilateral contracts	854	1,183	2,021
Self-production	437	428	416
Public auctions to distribution companies	3,160	2,425	1,798
<b>Generation volume</b>	<b>4,646</b>	<b>4,761</b>	<b>4,043</b>
<b>Revenues (US\$ million)(1)</b>	<b>4,410</b>	<b>7,693</b>	<b>5,173</b>

(1) Includes electricity sales revenues from the Power segment to other operating segments, service and other revenues from electricity companies.

**Fertilizers**

Our fertilizer plants in Bahia, Sergipe and Paraná produce ammonia and urea for the Brazilian market. The units in Bahia and Paraná also produce automotive liquid reducing agents (ARLA-32) and the unit in Sergipe also produces ammonium sulfate. The combined production capacity of these plants is 1,852,000 t/y of urea, 1,406,000 t/y of ammonia, 300,000 t/y of ammonium sulfate and 800,000 t/y of ARLA-32. Most of our ammonia production is used to produce urea, and the excess production is mainly sold in the Brazilian market. In 2015, we improved the utilization rate of these plants yielding to a 27% increase in production volume compared to 2014.



The table below shows our ammonia and urea sales, and revenues for each of the past three years:

	<b>Ammonia and Urea (t/y)</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Ammonia	240,620	234,339	205,029
Urea	1,283,673	1,046,004	1,071,827
Revenues (US\$ million)(1)	676	663	621

---

(1) Includes nitrogenous fertilizers sales revenues from the Fertilizer segment to other operating segments, services and other revenues from fertilizers companies.

Due to major changes in our business context, in 2015, we suspended investments in the following fertilizer projects:

- UFN III, with the capacity to produce 1.2 mmt/y of urea and 70 mt/y of ammonia from 2.2 mmm<sup>3</sup>/d of natural gas; and
- UFN V, with the capacity to produce 519,000 t/y of ammonia from 1.3 mmm<sup>3</sup>/d of natural gas.

Table of Contents

In 2015, we decided to cancel the UFN V fertilizing project, while the UFN III fertilizing project remains under suspension. We recognized impairment losses for the fiscal year ended December 31, 2015 of US\$501 million with respect to the UFN III fertilizer facility due to the use of a higher discount rate (reflecting an increase in Brazil's risk premium) and the delay in expected future cash inflows resulting from postponement of the project and of US\$190 million with respect to the UFN V fertilizer facility due to our decision to cancel the project. For further information, see Note 14 to our audited consolidated financial statements. We previously recognized impairment losses for the fiscal year ended December 31, 2014 of US\$116 million with respect to the Araucária fertilizer facility.

*Renewable Energy*

We have invested, alone and in partnership with other companies, in renewable power generation sources in Brazil, including wind. We currently hold minority equity interests in four wind power plants (Mangue Seco 1, 2, 3 and 4) and two small hydroelectric power plants (Areia and Água Limpa), and we hold an 100% equity interest in a wind power plant (Macau) and a solar power plant (UFVAR). The power generation capacity we have (alone and through the equity interests we hold in renewable energy companies) is equivalent to 25.4 MW of hydroelectric capacity, 1.1 MW of solar capacity and 105.8 MW of wind capacity. We and our partners sell energy from these plants directly to the Brazilian federal government via its renewable energies incentive program and the 2009 "reserve energy" auctions.

*Gas and Power Abroad*

We also participate in the gas and power sector in other South American countries. See below our international activities by region:

*South America*

We conduct gas and power activities in Argentina, Bolivia and in Uruguay.

- In **Argentina**, through Pesa, we own four electric power plants, Pichi Picún Leufú (hydrogeneration), Genelba (gas powered combined cycle), Genelba Plus (gas powered) and EcoEnergia (Cogeneration), and we hold an interest in two other electric power plants, Central Termelétrica José de San Martín S.A. and Central Termelétrica Manuel Belgrano S.A. and we also have a stake in a natural gas transportation company called TGS (Transportadora Gas del Sur). Through Petrobras International Braspetro B.V. – PIB BV (Netherlands), we have an interest in Mega Company, a natural gas separation facility.
- In **Bolivia**, we hold an 11% interest in GTB, owner of the Bolivian section of the Bolivia-to-Brazil (BTB) pipeline that transports natural gas we produce in Bolivia to the Brazilian market. We also hold a 21% interest in the Rio Grande Compression Unit, where the Bolivia-Brasil Gas Pipeline starts.

- In **Uruguay**, we participate in the two companies that are responsible for the distribution of natural gas by pipelines in the country: (i) Distribuidora de Gás Montevideo S.A., a company 100% owned by Petrobras, that supplies natural gas to the Montevideo area; and (ii) Conecta S.A., a company in which we hold a 55% equity interest (the remaining 45% belong to ANCAP, Uruguay's state oil company), that supplies natural gas to the rest of country.

**Biofuels**

	<b>Biofuels Key Statistics</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
<b>Biofuel:</b>			
Sales revenues	229	266	388
Income (loss) before income taxes	(317)	(166)	(166)
Property, plant and equipment	91	205	222
Capital expenditures	43	112	143

Brazil is a global leader in the use and production of biofuels. In 2015, 88.6% of new light vehicles sold in Brazil had flexfuel capability, and service stations offered a choice of 100% ethanol and an ethanol/gasoline blend. Starting in March 2015, the Brazilian federal government increased the anhydrous ethanol content requirement for the gasoline sold in Brazil from 25% to 27%.

We recognized impairment losses for the fiscal year ended December 31, 2015 of US\$185 million (including US\$139 million of impairment losses on equity-method investments) with respect to our biofuel segment, mainly attributable to an increase in the post-tax discount rate (reflecting an increase in Brazil's risk premium) and the postponement of biofuel projects for an extended period of time. For further information, see Note 14 to our audited consolidated financial statements.

***Biodiesel***

Since November 2014, all diesel fuel sold in Brazil is required to have at least 7% biodiesel. In 2015, we supplied 17.4% of Brazil's biodiesel (assuming 100% of BSBIOS Sul Brasil production), ranking us as the main biodiesel supplier in Brazil, and we act as a market catalyst by securing and blending biodiesel supplies and furnishing these to smaller distributors as well as our own service stations. We directly own three biodiesel plants and, through our 50% interest in BSBIOS Indústria e Comércio de Biodiesel Sul Brasil S.A. (BSBIOS Sul Brasil), we own two additional plants. The biodiesel production capacity of these five plants totals 15.6 mbb/d.

*Ethanol*

Due to our ownership interest in Guarani S.A. (Guarani), Brazil's fifth largest sugarcane processor, Nova Fronteira Bioenergia S.A. (Nova Fronteira) and Bambuí Bioenergia S.A. (Bambuí Bioenergia), we also have a presence in the whole ethanol and sugar production chain and we also sell the exceeding electricity generated from sugarcane bagasse burn. We have all the necessary infrastructure for the distribution and export of ethanol. On January 5, 2016, we increased our equity interest in Guarani S.A. from 42.95% to 45.97%.

Through our associated companies Bambuí Bioenergia, Nova Fronteira and Guarani, we own ethanol plants situated in the States of Minas Gerais, Goiás and São Paulo and in Mozambique, Africa. These associated companies' total milling in the 2015/2016 harvest amounted to 26.2 mmt of sugarcane, corresponding to an ethanol and sugar production of 20.3 mbbbl/d and 1.5 mmt respectively compared to 21.3 mbbbl/d and 1.6 mmt respectively in the 2014/2015 harvest. These associated entities sold 1.2 GWh of exceeding electricity generated during the 2015/2016 harvest.

**Corporate****Corporate Key Statistics**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
		<b>(US\$ million)</b>	
<b>Corporate:</b>			
Income (loss) before income taxes	(14,961)	(8,047)	(8,141)
Property, plant and equipment	1,949	2,811	3,345
Capital expenditures and investments	302	452	555

Table of Contents

Our Corporate segment comprises activities that cannot be attributed to other segments, including corporate financial management, central administrative overhead and actuarial expenses related to our pension and medical benefits for retired employees and their dependents.

## Organizational Structure

As of December 31, 2015, we had 24 direct subsidiaries and two direct joint operations as listed below. Twenty-one are entities incorporated under the laws of Brazil and three are incorporated abroad. We also have indirect subsidiaries (including Petrobras Argentina S.A. and PGF). See Exhibit 8.1 for a complete list of our subsidiaries and joint operations, including their full names, jurisdictions of incorporation and our percentage of equity interest.

### PETROBRAS

#### BRAZIL

Petrobras Distribuidora S.A. - BR

Petrobras Transporte S.A. -  
Transpetro

Petrobras Logística de Exploração e  
Produção S.A. - PB-LOG

Transportadora Associada de Gás  
S.A. - TAG

Petrobras Gás S.A. - Gaspetro

Petrobras Biocombustível S.A. - PBIO

Petrobras Logística de Gás - Logigás

Liquigás Distribuidora S.A.

Araucária Nitrogenados S.A.

Termomacaé Ltda.

Breitener Energética S.A.

Companhia Integrada Têxtil de  
Pernambuco - Citepe

#### ABROAD

Petrobras Netherlands B.V. - PNBV

Petrobras International Braspetro -  
PIB BV

Braspetro Oil Services Company -  
Brasoil

Termobahia S.A.

Companhia Petroquímica de  
Pernambuco - PetroquímicaSuape

Baixada Santista Energia S.A.

Petrobras Comercializadora de  
Energia Ltda. - PBEN

Fundo de Investimento Imobiliário  
RB Logística - FII

Petrobras Negócios Eletrônicos S.A. -  
E-Petro

Termomacaé Comercializadora de  
Energia Ltda

5283 Participações Ltda.

Downstream Participações Ltda.

Fábrica Carioca de Catalizadores S.A.  
- FCC (\*)

Ibiritermo S.A. (\*)

(\*) Joint operations.

## **Property, Plant and Equipment**

Our most important tangible assets are wells, platforms, refining facilities, pipelines, vessels, other transportation assets, power plants as well as fertilizers and biodiesels plants. Most of these are located in Brazil. We own and lease our facilities and some owned facilities are subject to liens, although the value of encumbered assets is not material.

We have the right to exploit crude oil and gas reserves in Brazil under concession agreements, but the reserves themselves are the property of the government under Brazilian law. Item 4. "Information on the Company" includes a description of our reserves and sources of crude oil and natural gas, key tangible assets, and material plans to expand and improve our facilities.

As of December 31, 2015, our property, plant and equipment included US\$19,158 million (US\$28,164 million as of December 31, 2014) related to the Assignment Agreement (see Item 10. "Additional Information—Material Contracts—Assignment Agreement.") On December 29, 2014, we submitted the last declaration of commerciality of crude oil and natural gas accumulations, located in the Entorno de Iara block, to the ANP, which prompted the initiation pursuant the revision process of the Assignment Agreement. Currently, all areas subject to the Assignment Agreement (Franco, Florim, Nordeste de Tupi, Entorno de Iara, Sul de Guar and Sul de Tupi blocks) are being reviewed for purposes of a revision of the terms of the Assignment Agreement. This process includes the preparation of reports by independent experts engaged by us and by the ANP and related discussions with the Brazilian federal government. The revision process, for all the areas subject to the Assignment Agreement, is currently ongoing and there is no formal or official date for its conclusion.

We also recognized impairment charges of US\$12,299 million in 2015 (US\$16,823 million in 2014) for certain property, plant and equipment, intangible assets and assets classified as held for sale. Further information about impairment of our assets is provided in Note 14 to our audited consolidated financial statements.

## **Regulation of the Oil and Gas Industry in Brazil**

### *Concession Regime for Oil and Gas*

Under Brazilian law, the Brazilian federal government owns all crude oil and natural gas subsoil accumulations in Brazil. The Brazilian federal government holds a monopoly over the exploration, production, refining and transportation of crude oil and oil products in Brazil and its continental shelf, with the exception that companies that were engaged in refining and distribution in 1953 were permitted to continue those activities. Between 1953 and 1997, we were the Brazilian federal government's exclusive agent for exploiting its monopoly, including the importation and exportation of crude oil and oil products.

As part of a comprehensive reform of the oil and gas regulatory system, the Brazilian Congress amended the Brazilian Constitution in 1995 to authorize the Brazilian federal



government to contract with any state or privately-owned company to carry out upstream, oil refining, cross-border commercialization and transportation activities in Brazil of oil, natural gas and their respective products. On August 6, 1997, Brazil enacted Law No. 9,478, which established a concession-based regulatory framework, ended our exclusive right to carry out oil and gas activities, and allowed competition in all aspects of the oil and gas industry in Brazil. Since that time, we have been operating in an increasingly deregulated and competitive environment. Law No. 9,478/1997 also created an independent regulatory agency, the ANP, to regulate the oil, natural gas and renewable fuel industry in Brazil, and to create a competitive environment in the oil and gas sector. Effective January 2, 2002, Brazil deregulated prices for crude oil, oil products and natural gas.

Table of Contents

Law No. 9,478/1997 established a concession-based regulatory framework and granted us the exclusive right to exploit crude oil reserves in each of our producing fields under the existing concession contracts for an initial term of 27 years from the date when they were declared commercially profitable. These are known as the “Round Zero” concession contracts. This initial 27-year period for production can be extended at the request of the concessionaire and subject to approval from the ANP. Law No. 9,478/1997 also established a procedural framework for us to claim exclusive exploratory rights for a period of up to three years, later extended to five years, to areas where we could demonstrate that we had made commercial discoveries or exploration investments prior to the enactment of the Law No. 9,478/1997. In order to perfect our claim to explore and develop these areas, we had to demonstrate that we had the financial capacity to carry out these activities, either alone or through other cooperative arrangements. Starting in 1999, all areas not already subject to concessions became available for public bidding conducted by the ANP. All the concessions that we have obtained since then were obtained through participation in public bidding rounds.

### *Taxation under Concession Regime for Oil and Gas*

According to the Law No. 9,478/1997 and under our concession agreements for exploration and production activities with ANP, we are required to pay the government the following:

- Signing bonuses paid upon the execution of the concession agreement, which are based on the amount of the winning bid, subject to the minimum signing bonuses published in the relevant bidding guidelines (*edital de licitação*);
- Annual retention bonuses for the occupation or retention of areas available for exploration and production, at a rate established by the ANP in the relevant bidding guidelines based on the size, location and geological characteristics of the concession block;
- Special participation charges at a rate ranging from 0 to 40% of the net income derived from the production of fields that reach high production volumes or profitability, according to the criteria established in the applicable legislation. Net revenues are 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. In 2015, we paid this tax on 21 of our fields, namely Albacora, Albacora Leste, Baleia Azul, Baleia Franca, Barracuda, Baúna, Cachalote, Canto do Amaro, Caratinga, Carmópolis, Jubarte, Leste do Urucu, Lula, Manati, Marlim, Marlim Leste, Marlim Sul, Mexilhão, Rio Urucu, Roncador and Sapinhoá; and
- Royalties, to be established in the concession contracts at a rate ranging between 5% and 10% of gross revenues from production, based on reference prices for crude oil or natural gas established by Decree No. 2,705 and ANP regulatory acts. In establishing royalty rates in the concession contracts, the ANP also takes into account the geological risks and expected productivity levels for each concession. Most of our crude oil production is currently taxed at the maximum royalty rate.

Law No. 9,478/1997 also requires concessionaires of onshore fields to pay to the owner of the land a participation fee that varies between 0.5% and 1.0% of the sales revenues derived from the production of the field.

*Production-Sharing Contract Regime for Unlicensed Pre-Salt and Potentially Strategic Areas*

Discoveries of large oil and natural gas reserves in the pre-salt areas of the Campos and Santos Basins prompted a change in the legislation regarding oil and gas exploration and production activities.

In 2010, three new laws were enacted to regulate exploration and production activities in pre-salt and other potentially strategic areas not subject to existing concessions: Law No. 12,351, Law No. 12,304, and Law No. 12,276. The enacted legislation does not impact the existing pre-salt concession contracts, which cover approximately 28% of the pre-salt areas.

Law No. 12,351/2010 regulates production-sharing contracts for oil and gas exploration and production in pre-salt areas not under concession and in potentially strategic areas to be defined by the CNPE. Under the production-sharing regime, we will be the exclusive operator of all blocks. The exploration and production rights for these blocks can either be granted to us on an exclusive basis or, in the case where they are not awarded to us on an exclusive basis, they will be offered under public bids. If offered under public bids, we would still be required to participate as the operator, with a minimum interest to be established by the CNPE that would not be less than 30%, with the additional right, at our discretion, to participate in the bidding process to increase our interest in those areas. Under the production-sharing regime, the winner of the bid will be the company that offers to the Brazilian federal government the highest percentage of “profit oil,” which is the production of a certain field after deduction of royalties and “cost oil,” which is the cost associated with oil production. According to Law No. 12,351, we must accept the economic terms of the winning bid.

On February 2016, the Brazilian Senate approved a bill of law that proposes to lift the requirement that we must necessarily act as the exclusive operator and hold a minimum 30% interest in pre-salt areas not under concession and in potentially strategic areas to be offered in future public bids. At this stage, there is no estimate as to when and if this bill of law will have its terms substantially amended or if this bill of law will be passed into law by the Brazilian House of Representatives and ratified by the Brazilian President.

Law No. 12,734 became partially effective on November 30, 2012, and amended Law 12,351, establishing a royalty rate of 15% applicable to the gross production of oil and natural gas

under future production sharing contracts.

Law No. 12,304/2010, authorized the incorporation of a new state-run non-operating company that will represent the interests of the Brazilian federal government in the production-sharing contracts and will manage the commercialization contracts related to the Brazilian federal government's share of the "profit oil." This new state-owned company was incorporated on August 1, 2013, named Pré-Sal Petróleo S.A. – PPSA, and will participate in operational committees, with a casting vote and veto powers, as defined in the contract, and will manage and control costs arising from production-sharing contracts. Where production-sharing contracts are concerned, PPSA will exercise its specific legal activities alongside the ANP, the independent regulatory agency that regulates and oversees oil and gas activities under all exploration and production regimes, and the CNPE, the entity that sets the guidelines to be applied to the oil and gas sector, including with respect to the new regulatory model.

### *Assignment Agreement (Cessão Onerosa) and Global Offering*

Pursuant to Law No. 12,276/2010, we entered into an agreement with the Brazilian federal government on September 3, 2010 (Assignment Agreement), under which the government assigned to us the right to conduct activities for the exploration and production of oil, natural gas and other fluid hydrocarbons in specified pre-salt areas, subject to a maximum production of five bnboe. The initial contract price for our rights under the Assignment Agreement was R\$74,807,616,407, which was equivalent to US\$42,533,327,500 as of September 1, 2010. See Item 10. "Additional Information—Material Contracts—Assignment Agreement."

### *Natural Gas Law of 2009*

In March 2009, the Brazilian Congress enacted Law No. 11,909, or Gas Law, regulating activities in the gas industry, including transport, processing, storage, liquefaction, regasification and commercialization. The Gas Law created a concession regime for the construction and operation of new pipelines to transport natural gas, while maintaining an authorization regime for pipelines subject to international agreements. According to the Gas Law, after a certain exclusivity period, operators (*transportadores*) will be required to grant access to transport pipelines and maritime terminals, except LNG terminals, to third parties in order to maximize utilization of capacity.

The Gas Law authorized the ANP to regulate prices for the use of gas transport pipelines subject to the new concession regime, based on a procedure defined in the Gas Law as a "*chamada pública*," and to approve prices submitted by carriers (*carregadores*), according to previously established criteria, for the use of new gas transport pipelines subject to the authorization regime.

Authorizations previously issued by the ANP for natural gas transport will remain valid for 30 years from the date of publication of the Gas Law, and initial carriers (*carregadores iniciais*) were granted exclusivity in these pipelines for 10 years. All pipelines that Petrobras's subsidiaries currently own and operate in Brazil are subject to an authorization regime. The ANP will issue regulations governing third-party access and carrier compensation if no agreement is reached between the parties.

The Gas Law also authorized certain consumers, who can purchase natural gas on the open market or obtain their own supplies of natural gas, to construct facilities and pipelines for their own use in the event local gas distributors controlled by the states, which have monopoly over local gas distribution, do not meet their distribution needs. These consumers are required to delegate the operation and maintenance of the facilities and pipelines to local gas distributors, but they are not required to sign gas supply agreements with the local gas distributors.

In December 2010, Decree No. 7,382 was enacted in order to regulate Chapter I to VI and VIII of the Gas Law as it relates to activities in the gas industry, including transportation and commercialization. Since the publication of this decree, a number of administrative regulations were enacted by the ANP and the MME in order to regulate various issues in the Gas Law and Decree No. 7,382 that needed to be further clarified. Among those is ANP Resolution No. 51/2013, which prevents a carrier from holding any equity interest in concessionaires of gas transport pipelines. Resolution No. 51/2013 applies only to the concessions granted after its publication, not affecting, therefore, the transportation of Petrobras's natural gas production through pipelines operated by its subsidiaries and subject

to the previous authorization regime.

### *Price Regulation*

Until the passage of Law No. 9,478 in 1997, the Brazilian federal government had the power to regulate all aspects of the pricing of crude oil, oil products, ethanol, natural gas, electric power and other energy sources. In 2002, the government eliminated price controls for crude oil and oil products, although it retained regulation over certain natural gas sales contracts and electricity. Concurrently, the Brazilian federal government has periodically created and adjusted taxes applicable to crude oil, oil and natural gas products, which have been used as a tool to maintain price stability to end consumers and also to increase its tax revenues.

### **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, and they fall under the regulatory authority of the *Conselho Nacional do Meio Ambiente* (National Council for the Environment, or CONAMA).

Table of Contents

Our offshore activities are subject to the administrative authority of IBAMA, which issues operating and drilling licenses. We are required to submit reports, including safety and pollution monitoring reports to IBAMA in order to maintain our licenses.

Most of the onshore environmental, health and safety conditions are controlled either at the federal or the state level depending on the localization of our facilities, the type of activity under development and other criteria to be set forth in regulation that is still pending. However, it is also possible for these conditions to be controlled on a local basis whenever the activities generate a local impact or are established in a county conservation unit. Under Brazilian law, there is strict and joint liability for environmental damage, mechanisms for enforcement of environmental standards and licensing requirements for polluting activities.

Individuals or entities whose conduct or activities cause harm to the environment are subject to criminal and administrative sanctions. Government environmental protection agencies may also impose administrative sanctions for noncompliance with environmental laws and regulations, including:

- Fines;
- Partial or total suspension of activities;
- Requirements to fund reclamation and environmental projects;
- Forfeiture or restriction of tax incentives or benefits;
- Closing of establishments or operations; and
- Forfeiture or suspension of participation in credit lines with official credit establishments.

We are subject to a number of administrative and legal proceedings relating to environmental matters. For more information about these proceedings, see Item 8. “Financial Information—Legal Proceedings.” and Note 30 to our audited consolidated financial statements included in this annual report.

In 2015, we invested US\$1.1 billion in environmental projects, compared to US\$1.4 billion in 2014 and US\$1.5 billion in 2013. These investments continued to be primarily directed at reducing emissions and wastes from industrial processes, managing water use and effluents, remediating impacted areas, implementing new environmental technologies, upgrading our pipelines and improving our ability to respond to emergencies.

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



The protection of human health and the environment is one of our primary concerns, and is essential to our success as an integrated energy company.

We have a Health, Safety and Environmental (HSE) Committee (*Comitê de Segurança, Meio Ambiente e Saúde*) composed of three members of our board of directors who are responsible for assisting our board in the following matters:

- Definition of strategic goals in relation to HSE matters;
- Establishment of global policies related to the strategic management of HSE matters within Petrobras's group of companies;
- Assessment of the conformity of Petrobras's Strategic Plan to its global HSE policies, among others.

Table of Contents

Our efforts to address health, safety and environmental concerns and ensure compliance with environmental regulations (which in 2015 totaled an investment of R\$6.9 billion, or US\$2.07 billion) involve the management of environmental costs related to production and operations, pollution control equipment and systems, projects to rehabilitate degraded areas, safety procedures and initiatives for emergency prevention and control, health and safety programs as well as:

- An HSE management system that seeks to minimize the impacts of operations and products on health, safety and the environment, reduce the use of natural resources and pollution and prevent accidents;
- ISO 14001 (environment) and OHSAS 18001 (health and safety) certification of our operating units. All the oil refined in Brazil was processed by certified units. The *Frota Nacional de Petroleiros* (National Fleet of Vessels) has been fully certified by the International Maritime Organization (IMO) International Management Code for Safe Operation of Ships and for Pollution Prevention (ISM Code) since December 1997;
- Regular and active engagement with the MME and IBAMA, in order to discuss environmental issues related to new oil and gas production and other transportation and logistical aspects of our operations;
- A strategic goal to reduce the intensity of greenhouse gas emissions, along with a set of performance indicators with targets to monitor progress with respect to this goal; and
- We evaluate each of our operational projects to identify risks and to ensure compliance with all of our HSE requirements and the adoption of the best HSE practices throughout a project's life cycle. In addition, we conduct more extensive environmental studies for new projects when required by applicable environmental legislation.

In 2015, our emissions decreased by 3.7% compared to 2014, mainly due to higher recovery of associated gas, reduction of fuel oil and diesel use in thermoelectric power plants and reduction of emissions in shipping operations. We are committed to reducing the intensity of greenhouse gas emissions from our processes and products through several initiatives,

including reduction of gas flaring, energy efficiency measures and operational improvements.

Eliminating fatal accidents and achieving performance levels comparable to the best international oil and gas operators when it comes to the prevention of injuries to our employees and third parties are the two most important goals set by our safety management. Although we develop prevention programs in all of our operating units, we recorded 16 fatalities involving our own and contractors' employees in 2015 (compared to 10 in 2014), mainly attributable to an accident at FPSO Cidade de São Mateus in February 2015, which caused nine fatalities. We investigate all accidents reported in order to identify their causes and then take preventive and corrective actions, which are regularly monitored once they are adopted. In cases of serious accidents, we send out company-wide alerts to enable other operating units to assess the probability of similar events occurring in their own operations.

### *Environmental Remediation Plans and Procedures*

As part of our environmental plans, procedures and efforts, we maintain detailed response and remediation contingency plans to be implemented in the event of an oil spill or leak from our offshore operations. In order to respond to these events, Petrobras has 36 dedicated oil spill recovery vessels fully equipped for oil spill control and firefighting, 113 support boats and other vehicles, 270 additional support and recovery boats available to fight offshore oil spills and leaks, around 92 km of containment booms and 118 km of absorbent booms and around 113,000 liters of oil dispersants, among others. These resources are distributed in 12 environmental protection centers in strategic areas in which we operate throughout Brazil and in emergency response centers (distributed over 21 cities) in order to ensure rapid and coordinated response to onshore or offshore oil spills. Our regional facilities are supported by 11 local advanced bases dedicated to oil spill prevention, control and response.

We have more than 500 trained workers available to respond to oil spills 24 hours a day, seven days a week, and we can mobilize additional trained workers for shoreline cleanups on short notice from a large group of trained environmental agents in the country. While these workers are located in Brazil, they are also available to respond to an offshore oil spill outside of Brazil.

Since 2012, Petrobras has been a participating member of the Oil Spill Response Limited – OSRL, an international organization that brings together over 160 corporations, including oil major, national/independent oil companies, energy related companies as well as other companies operating elsewhere in the oil supply chain. OSRL participates in the Global Response Network, an organization composed of several other companies dedicated to fighting oil spills. As a member of the OSRL, Petrobras has access to all resources available through that network, and we also subscribe to their Subsea Well Intervention Services, which provides swift international deployment of response-ready capping and containment equipment. The capping equipment is stored and maintained at bases worldwide, including Brazil. An OSRL Brazilian base opened in March 2014 and is now operational.

In 2015, we conducted 22 emergency drills of regional scope with the Brazilian navy, the civil defense, firefighters, the military police, environmental organizations and local governmental and community entities.

We set up a Zero Spill Plan, aiming at optimizing management and reducing the risk of oil spills in our operations. This plan encompasses investments to improve the management of processes and to ensure the integrity of our equipment and installations. Additionally, Petrobras has a model of communication, processing and recording of oil spills that permits the daily monitoring of these incidents, their impacts and mitigation measures.

The oil spill level in our upstream operations in 2015 was kept below 0.5 m<sup>3</sup> per mmbbl produced. Data for 2012 compiled by the International Association of Oil & Gas Producers indicates that the industry average was 0.76 m<sup>3</sup> of oil spilled per mmbbl produced. We continue to evaluate and develop initiatives to address HSE concerns and to reduce our

exposure to HSE risks. In 2015, we had oil spills totaling 450.5 barrels of crude oil, compared to 437.1 barrels of crude oil in 2014 and 1,176 barrels of crude oil in 2013.

## **Insurance**

Our insurance programs focus principally on the evaluation of risks and the replacement value of assets, which is customary for our industry. Under our risk management policy, risks associated with our principal assets, such as refineries, tankers and offshore production units and drilling rigs, are insured for their replacement value with third-party Brazilian insurers. Although some policies are issued in Brazil, most of our policies are reinsured abroad with reinsurers rated A- or higher by Standard & Poor's rating agency or B+ or higher by A.M. Best. Part of our international operations are insured or reinsured by our Bermudian subsidiary BEAR following the same rating criteria.

Table of Contents

Less valuable assets, including but not limited to 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 and a few specific assets in Brazil. We generally do not maintain coverage for our wells for all of our Brazilian operations, except when required by a joint operating agreement. Although we do not insure most of our pipelines, we have insurance against damage or loss to third parties resulting from specific incidents, such as unexpected seepage and oil pollution. We also maintain coverage for risks associated with cargo, hull and machinery. All projects and installations under construction that have an estimated maximum loss above US\$80 million are covered by a construction insurance policy.

We have operations in 12 countries outside Brazil and maintain varying levels of third-party liability insurance for our domestic and international operations as a result of a variety of factors, including our country risk assessments, whether we have onshore and offshore operations or legal requirements imposed by the particular country in which we operate. We maintain insurance coverage for operational third-party liability with respect to our onshore and offshore activities, including losses to third parties resulting from environmental risks such as oil spills, in Brazil up to an aggregate policy limit of US\$250 million. We also maintain additional protection and indemnity (P&I) marine insurance against third-party liability related to our domestic offshore operations up to an aggregate policy limit of up to US\$500 million for a period of 12 months. In the event of an explosion or similar event at one of our offshore rigs in Brazil, these policies can provide combined third-party liability coverage of up to US\$750 million.

Our domestic and international operational third-party liability policies cover claims made against us by or on behalf of individuals who are not our employees in the event of property damage, personal injury or death, subject to the policy limits set forth above. As a general rule, our service providers are required to indemnify us for a claim we pay directly to a third party as a result of a court decision holding us liable for the actions of that service provider. Our operational third-party liability policies also cover environmental damage from oil spills (including liability arising from an explosion or similar sudden and accidental event at one of our offshore rigs) as well as litigation and clean-up and remediation costs, but do not cover governmental fines or punitive damages.

We maintain separate “control-of-well” insurance policies at our international operations to cover liability arising from the uncontrolled eruption of oil, gas, water or drilling fluid, as well as to cover claims for environmental damage from well blow-outs and similar events as well as related clean-up costs, with aggregate policy limits up to US\$540 million for a period of 18 months depending on the country. In the U.S. Gulf of Mexico, for example, we maintain

third-party liability coverage up to an aggregate policy limit of US\$250 million, and control-of-well liability insurance up to US\$540 million. Depending on the particular circumstances, either of these policies could apply in the event of an explosion or similar event at one of our offshore rigs in the U.S. Gulf of Mexico.

We generally do not maintain control-of-well insurance for our domestic operations onshore and offshore Brazil, except when required by a joint operating agreement. As a result, we would bear the costs of clean-up, decontamination and any proceedings arising out of a control-of-well incident. Any loss of hydrocarbon containment from our domestic operations onshore and offshore that is not attributable to a control-of-well issue would be covered by either our Protection & Indemnity (P&I) insurance, with coverage of up to US\$500 million for our mobile offshore units, or our onshore-offshore liability policy, with coverage of up to US\$250 million.

The premium for renewing our domestic property risk insurance policy for an 18-month period beginning May 2015 was US\$79.8 million. This represented a nominal decrease of 12% over the prior 18-month period. The insured value of our assets, in the same period, increased by 13.6% to US\$182.5 billion. Since 2001, our risk retention for operational risks has been US\$25 million while for engineering risks it may reach US\$80 million in certain circumstances.

## **Additional Reserves and Production Information**

During 2015, our oil and gas production in Brazil averaged 2,386 mboe/d, of which 89% was oil and 11% was natural gas. The Campos Basin is one of Brazil's main and most prolific oil and gas offshore basins, with over 60 hydrocarbon fields discovered, eight large oil fields and a total area of approximately 115,000 km<sup>2</sup> (28.4 million acres). In 2015, the Campos Basin produced an average 1,488 mbbbl/d of oil and 577 mmcf/d (15 mmm<sup>3</sup>/d) of natural gas, comprising 66% of our total production from Brazil. We also carry out limited oil shale mining operations in São Mateus do Sul, in the Paraná Basin of Brazil, and convert the kerogen (solid organic matter) from these deposits into synthetic oil and gas. This operation is conducted in an integrated facility and its final products are fuel gas, LPG, shale naphtha and shale fuel oil. Our business unit does not utilize the fracking method or the hydraulic fracturing method for oil production, since they are not appropriate in the context of our operations. Also, we do not inject any water or chemicals in the soil in connection with our open pit oil shale mining operations. Our process consists of crushing, screening and subsequently heating all the shale at high temperatures (pyrolysis) and we have in place a proper segregation process for the by-products derived from such process.

On December 31, 2015, our estimated proved reserves in Brazil totaled 10.2 bnbbbl of oil equivalent, including 8.6 bnbbbl of crude oil, condensate and synthetic oil and 254.3 bnm<sup>3</sup> (9.6 tcf) of natural gas and synthetic gas. As of December 31, 2015, our domestic proved developed crude oil, condensate and synthetic oil reserves represented 50% of our total domestic proved crude oil, condensate and synthetic oil reserves, and our domestic proved developed natural gas and synthetic gas reserves represented 55.5% of our total domestic proved natural gas and synthetic gas reserves.

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, reservoir engineering studies and economic data. All reserve estimates involve some degree of uncertainty. The uncertainty depends primarily on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of that data. Our estimates are thus made using the most reliable data and technology at the time of the estimate, in accordance with the best practices in the oil and gas industry and regulations promulgated by the SEC.

### *Internal Controls over Proved Reserves*

The reserve estimation process begins with an initial evaluation of our assets by geophysicists, geologists and engineers. Corporate Reserves Coordinators (*Coordenadores de Reservas Corporativos*, or CRCs) safeguard the integrity and objectivity of our reserve estimates by supervising and providing technical support to Regional Reserves Coordinators (*Coordenadores de Reservas Regionais*, or CRRs) who are responsible for preparing the reserve estimates. Our CRRs and CRCs have degrees in geology, engineering and accounting and are trained internally and abroad in international reserve estimates seminars. CRCs are responsible for compliance with SEC rules and regulations, consolidating and auditing the reserve estimation process. The technical person primarily responsible for overseeing the preparation of our domestic reserves has 27 years of experience in the field and has been with Petrobras for over 32 years. The technical person primarily responsible for overseeing the preparation of our international reserves has 26 years of experience in the field and has been with Petrobras for 33 years. Our reserve estimates are approved by our board of executive officers, which then informs our board of directors of its approval.



Table of Contents

DeGolyer and MacNaughton (D&M) used our reserve estimates to conduct a reserve audit of 95.2% of the net proved crude oil, condensate and natural gas reserves as of December 31, 2015 from certain properties we own in Brazil. In addition, D&M used its own estimates of our reserves to conduct a reserves evaluation of 100% of the net proved crude oil, condensate, NGL and natural gas reserves as of December 31, 2015 from the properties we operate in Argentina. Furthermore, D&M used our reserve estimates to conduct a reserves audit of 100% of the net proved crude oil, condensate and natural gas reserves as of December 31, 2015 in properties we operate in the United States. The reserve estimates were prepared in accordance with the reserves definitions of Rule 4-10(a) of Regulation S-X of the SEC. For further information about our proved reserves, see “Supplementary Information on Oil and Gas Exploration and Production” beginning on page F-94. For disclosure describing the qualification of D&M’s technical person primarily responsible for overseeing our reserves audit and reserves evaluation, see Exhibit 99.1.

*Changes in Proved Reserves*

In 2015, our proved reserves decreased by 2,186 mmboe due to revisions of previous estimates, mostly as result of the decrease in oil prices during fiscal year of 2015, and decreased by 22 mmboe due to sales of proved reserves. This decrease was partially offset by the incorporation of 494 mmboe of proved reserves from discoveries of new accumulations and extensions in Brazil, specifically in the Santos, Campos and Espírito Santo Basins, and in Argentina, in the Neuquina Basin, and the incorporation of 22 mmboe due to improved recovery. The net result (excluding production) was a decrease of 1,692 mmboe in our proved reserves in 2015. Considering a production of 932 mmboe in 2015, our net decrease of proved reserves was 2,625 mmboe. This volume production does not take into account the production of Extended Well Tests (EWTs) in exploratory blocks in Brazil, and production in Bolivia, since the Bolivian Constitution prohibits the disclosure and registration of its reserves.

At year-end 2015 compared to year-end 2014, our proved undeveloped reserves company-wide increased by a net total of 368.5 mmboe. Thus, we had a total of 5,141.6 mmboe of proved undeveloped reserves company-wide at December 31, 2015, compared to 4,773.2 mmboe of proved undeveloped reserves company-wide at December 31, 2014.

In Brazil, the net increase in our proved undeveloped reserves in 2015 compared to 2014 is mostly derived from extensions and discoveries, amounting to 408.4 mmboe, mainly in the pre-salt areas of Santos Basins. In addition, our domestic proved undeveloped reserves were increased by 243.2 mmboe due to revisions to previous estimates, and were increased by 0.5 mmboe due to improved recovery. This net increase was partially offset by the conversion of

some of our proved undeveloped reserves to proved developed reserves, mainly attributable to the drilling of wells in existing production fields, amounting to 262.9 mmboe.

All reserve volumes described above are “net” to the extent that they only include Petrobras’s proportional participation in reserve volumes and exclude reserves attributed to our partners.

Table of Contents

In 2015, we invested a total of US\$16.8 billion in development projects, of which 92% (US\$15.5 billion) was invested in Brazil, and converted a total of 296.5 mmboe of proved undeveloped reserves to proved developed reserves, approximately 89% (262.9 mmboe) of which were Brazilian reserves.

Most of our investments relate to long-term development projects, which are developed in phases due to the large volumes, and extensions involved, the deep and ultra-deep water infrastructure and the production resources complexity. In these cases, the full development of the reserves related to these investments can exceed five years.

We had a total of 5,141.6 mmboe of proved undeveloped reserves company-wide at year-end 2015, approximately 8.9% (455.9 mmboe) of which have remained undeveloped for five years or more as a result of several factors affecting development and production, including the inherent complexity of ultra-deep water development projects, particularly in Brazil, and constraints in the capacity of our existing infrastructure.

The majority of the 455.9 mmboe of our proved undeveloped reserves that have remained undeveloped for five years or more consist of reserves in the Santos Basin and in the Campos Basin, in which we are making investments to develop necessary infrastructure.

Table of Contents

The following tables set forth our production of crude oil, natural gas, synthetic oil and synthetic gas by geographic area in 2015, 2014 and 2013:

	2015				Total (mboe/d)
	Oil (m bbl/d)	Synthetic Oil (m bbl/d)	Nat. Gas (m mcf/d)	Synthetic Gas (m mcf/d)	
	(4)	(3)	(1)	(1)(3)	
<b>Brazil*</b>	2,125.5	2.8	1,542.7	0.9	2,386.5
<b>International:</b>					
South America (outside of Brazil)	38.6	–	474.9	–	117.8
North America	30.6	–	67.2	–	41.8
Africa	–	–	–	–	–
Total International	69.2	–	542.1	–	159.6
Total consolidated production	2,194.7	2.8	2,084.8	–	2,546.1
<b>Equity and non-consolidated affiliates(2):</b>					
South America (outside of Brazil)	3.4	–	0.9	–	3.5
Africa	26.6	–	–	–	26.6
<b>Worldwide production</b>	<b>2,224.7</b>	<b>2.8</b>	<b>2,085.7</b>	<b>0.9</b>	<b>2,576.2</b>

- 
- \* Roncador field no longer represents more than 15% of our total proved reserves.
- (1) Natural gas production figures are the production volumes of natural gas available for sale, excluding flared and reinjected gas and gas consumed in operations.
- (2) Equity-accounted investees.
- (3) We produce synthetic oil and synthetic gas from oil shale deposits in São Mateus do Sul, in the Paraná Basin of Brazil.
- (4) Oil production includes LNG and production from extended well tests.

Table of Contents

The following table sets forth our estimated net proved developed and undeveloped reserves of crude oil and natural gas by region as of December 31, 2015.

Reserves category	Estimated Net Proved Developed and Undeveloped Reserves			Reserve
	Oil	Natural gas	Total oil and natural gas	
	(mmbbl)	(bncf)	(mmboe)	(mmbbl)(1)
<b>Proved developed:</b>				
<b>Brazil</b>	4,266.5	5,320.5	5,153.2	6.
<b>International</b>				
South America (outside of Brazil)	39.7	366.3	100.8	
North America	53.6	122.5	74.0	
Total International	93.4	488.8	174.9	
Total consolidated proved developed reserves	4,359.8	5,809.3	5,328.1	6.
<b>Equity and non-consolidated affiliates</b>				
South America (outside of Brazil)	6.6	8.0	7.9	
Africa	28.0	10.4	29.8	
Total non-consolidated proved developed reserves	34.7	18.4	37.7	
<b>Total proved developed reserves</b>	<b>4,394.5</b>	<b>5,827.7</b>	<b>5,365.8</b>	<b>6.</b>
<b>Proved undeveloped:</b>				
<b>Brazil</b>	4,277.7	4,267.2	4,988.9	
<b>International</b>				
South America (outside of Brazil)	12.5	314.2	64.9	
North America	37.0	16.0	39.7	
Total International	49.5	330.3	104.6	
Total consolidated proved undeveloped reserves	4,327.2	4,597.5	5,093.4	
<b>Equity and non-consolidated affiliates</b>				
South America (outside of Brazil)	7.9	8.9	9.4	
Africa	37.8	6.2	38.8	
Total non-consolidated proved undeveloped reserves	45.7	15.1	48.2	
<b>Total proved undeveloped reserves</b>	<b>4,372.9</b>	<b>4,612.6</b>	<b>5,141.6</b>	
<b>Total proved reserves (developed and undeveloped)</b>	<b>8,767.4</b>	<b>10,440.3</b>	<b>10,507.4</b>	<b>6.</b>

(1) Volumes of synthetic oil and synthetic gas from oil shale deposits in the Paraná Basin in Brazil have been included in our proved reserves in accordance with the SEC rules for estimating and disclosing reserve quantities.



Table of Contents

The table below summarizes information about the changes in total proved reserves of our consolidated entities for 2015, 2014 and 2013:

**Total Proved Developed and Undeveloped Reserves (consolidated entities only)(1)**

	Oil (mmbbl)	Natural gas (bcnf)	Total oil and natural gas (mmboe)	Synthetic oil (mmbbl)	Synthetic gas (bcnf)
<b>Information for the year ended December 31, 2015</b>					
Estimates	11,037.5	12,081.0	13,051.0	7.9	10.0
Revisions	(1,990.8)	(1,178.3)	(2,187.2)	0.1	0.2
Net changes	1.1	27.9	5.8	-	-
Beginning of year	-	-	-	-	-
End of year	411.9	492.2	494.0	-	-
Revisions	(766.0)	(924.5)	(920.1)	(1.0)	(1.4)
Net changes	(6.8)	(91.4)	(22.0)	-	-
End of year	8,687.0	10,406.8	10,421.5	6.9	9.3
<b>Information for the year ended December 31, 2014</b>					
Estimates	10,947.7	12,483.2	13,028.3	8.8	11.8
Revisions	631.4	539.6	721.4	0.2	0.3
Net changes	0.5	10.8	2.3	-	-
Beginning of year	22.9	47.1	30.8	-	-
End of year	272.3	264.0	316.3	-	-
Revisions	(732.9)	(911.8)	(884.8)	(1.1)	(1.4)
Net changes	(104.5)	(351.9)	(163.1)	-	-
End of year	11,037.5	12,081.0	13,051.0	7.9	10.0
<b>Information for the year ended December 31, 2013</b>					
Assets with loss of control(2)	10,928.5	11,541.2	12,852.1	8.3	13.3
Revisions	(65.0)	(22.5)	(68.8)	-	-
Net changes	(74.7)	(213.3)	(110.2)	1.3	(0.1)
Beginning of year	124.2	916.0	276.8	-	-
End of year	0.0	0.4	0.1	-	-
Revisions	851.4	1,193.5	1,050.3	-	-
Net changes	(707.5)	(878.5)	(853.9)	(0.8)	(1.4)
End of year	(109.2)	(53.5)	(118.1)	-	-
End of year	10,947.7	12,483.2	13,028.3	8.8	11.8

(1) Natural gas production volumes used in this table are the net volumes withdrawn from Petrobras's proved reserves, including flared gas consumed in

operations and excluding reinjected gas. Oil production volumes used in this table are net volumes withdrawn from Petrobras's proved reserves and exclude LNG and production from extended well tests. As a result, the oil and natural gas production volumes in this table are different from those shown in the production table above, which shows the production volumes of natural gas available for sale.

- (2) This line represents the amount of proved reserves excluded from our consolidated total proved reserves due to the implementation of our joint venture with BTG Pactual E&P BV to jointly explore oil and gas opportunities in Africa. Since July 2013, we no longer hold the corporate control of the entities incorporated in Nigeria directly responsible for our operations in such country. As such, we no longer consolidate the Nigeria reserves held by Brasoil Oil Services Company (Nigeria) Ltd., Petroleo Brasileiro Nigeria Ltd into our consolidated reserves.



Table of Contents

We do not have any material acreage expiring before 2025.

The following tables show the number of gross and net productive oil and natural gas wells and total gross and net developed and undeveloped oil and natural gas acreage in which Petrobras had interests as of December 31, 2015.

**Gross and Net Productive Wells and Gross and Net Developed and Undeveloped Acreage  
As of December 31, 2015**

	Oil		Natural gas		Synthetic oil		Synth
	Gross	Net	Gross	Net	Gross	Net	ga
<b>Gross and net productive wells(1):</b>							
<b>Consolidated subsidiaries</b>							
Brazil	7,877	7,863	212	208	-	-	
International							
South America (outside of Brazil)	2,145	1,594	317.0	233.5	-	-	
North America	15	6.77	7.0	3.72	-	-	
<b>Total international</b>	2,160	1,600.77	324.0	237.22	-	-	
<b>Total consolidated</b>	10,037	9,463.77	536	445.22	-	-	
<b>Company and non-consolidated affiliates:</b>							
South America (outside of Brazil)	83	23	8.0	3.0	-	-	
Canada	40	4.96	0	0	-	-	
<b>Total gross and net productive wells</b>	10,160	9,491.73	544	448.22	-	-	

**As of December 31, 2015**

	Oil		Natural gas (in acres)		Synthetic oil		Synth
	Gross	Net	Gross	Net	Gross	Net	ga
<b>Gross and net developed acreage:</b>							
Brazil	4,596,389.14	2,687,729.33	51,066.03	29,136.61	346.01	346.0	
International							
South America (outside of Brazil)	505,826.9	317,991.56	16,221.62	65,871.6	-	-	
North America	16,866.2	11,958.8	7,438.4	3,123.0	-	-	
<b>Total international</b>	522,693.2	329,950.36	23,660.02	68,994.6	-	-	
<b>Total consolidated</b>	5,119,082.34	2,998,679.69	74,725.95	98,131.31	346.01	346.0	
<b>Company and non-consolidated affiliates:</b>							
South America (outside of Brazil)	228,856.0	56,106.0	19,740.6	6,441.1	-	-	
Canada	416,989.9	33,069.2	-	-	-	-	
<b>Total non-consolidated</b>	645,845.8	89,175.2	19,740.6	6,441.1	-	-	
<b>Total gross and net developed acreage</b>	5,764,928.14	3,087,854.89	94,466.56	104,572.41	346.01	346.0	



Table of Contents

	As of December 31, 2015								
	Oil		Natural gas (in acres)		Synthetic oil		Synthetic gas		
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	
<b>Gross and net undeveloped acreage:</b>									
<b>Brazil</b>	923,281.5	783,005.5	244,796.6	240,656.3	-	-	-	-	-
<b>International</b>									
South America (outside of Brazil)	132,067.4	86,833.0	261,381.4	160,203.9	-	-	-	-	-
North America	6,660.9	2,277.2	616.9	115.7	-	-	-	-	-
<b>Total international</b>	138,728.3	89,110.2	261,998.3	160,319.5	-	-	-	-	-
<b>Total consolidated</b>	1,062,009.9	872,115.7	506,794.9	400,975.8	-	-	-	-	-
<b>Equity and non-consolidated affiliates:</b>									
South America (outside of Brazil)	304,298.4	77,462.4	21,713.9	7,284.1	-	-	-	-	-
Africa	227,584.5	18,606.1	0.0	0.0	-	-	-	-	-
<b>Total non-consolidated</b>	531,883.0	96,068.5	21,713.9	7,284.1	-	-	-	-	-
<b>Total gross and net undeveloped acreage</b>	1,593,892.8	968,184.2	528,508.8	408,259.9	-	-	-	-	-

(1) A “gross” well or acre is a well or acre in which a working interest is owned, while the number of “net” wells or acres is the sum of fractional working interests in gross wells or acres.

Table of Contents

The following table sets forth the number of net productive and dry exploratory and development wells drilled for the last three years.

<b>Net Productive and Dry Exploratory and Development Wells</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Net productive exploratory wells drilled:</b>			
<b>Consolidated subsidiaries:</b>			
Brazil	41.07	48.3	67.55
South America (outside of Brazil)	3.7	4.7	3.5
North America	0.1	0.4	–
Africa	–	–	–
Other	–	–	–
Total consolidated subsidiaries	44.87	53.4	71.05
<b>Equity and non-consolidated affiliates:</b>			
South America (outside of Brazil)	–	–	–
Africa	–	–	–
<b>Total productive exploratory wells drilled</b>	<b>44.87</b>	<b>53.4</b>	<b>71.05</b>
<b>Net dry exploratory wells drilled:</b>			
<b>Consolidated subsidiaries:</b>			
Brazil	14.85	19.15	16.75
South America (outside of Brazil)	–	1.1	0.8
North America	0.5	–	0.9
Africa	–	–	–
Other	–	–	–
Total consolidated subsidiaries	15.35	20.25	18.45
<b>Equity and non-consolidated affiliates:</b>			
South America (outside of Brazil)	–	–	0.5
Africa	–	0.9	–
<b>Total dry exploratory wells drilled</b>	<b>15.35</b>	<b>21.15</b>	<b>18.95</b>
<b>Total number of net exploratory wells drilled</b>	<b>60.22</b>	<b>74.55</b>	<b>90.0</b>
<b>Net productive development wells drilled:</b>			
<b>Consolidated subsidiaries:</b>			
Brazil	523.525	397.97	399.73
South America (outside of Brazil)	70.9	41.8	57.7
North America	0.66	–	2.5
Africa	–	–	–
Other	–	–	–
Total consolidated subsidiaries	595.085	439.77	459.93
<b>Equity and non-consolidated affiliates:</b>			

South America (outside of Brazil)	0.7	0.4	1.5
Africa	0	0.7	0.6
<b>Total productive development wells drilled</b>	<b>595.785</b>	<b>440.87</b>	<b>462.03</b>

**Net dry development wells drilled:****Consolidated subsidiaries:**

Brazil	3.0	12.65	6
South America (outside of Brazil)	0.5	–	–
North America	–	–	–
Africa	–	–	–
Other	–	–	–
Total consolidated subsidiaries	3.5	12.65	6.0

**Equity and non-consolidated affiliates:**

South America (outside of Brazil)	–	–	–
Africa	–	0.1	–
<b>Total dry development wells drilled</b>	<b>3.5</b>	<b>12.75</b>	<b>6.0</b>
<b>Total number of net development wells drilled</b>	<b>599.285</b>	<b>453.62</b>	<b>468.03</b>

Table of Contents

The following table summarizes the number of wells in the process of being drilled as of December 31, 2015. For more information about our ongoing exploration and production activities in Brazil, see “—Exploration and Production—Activities in Brazil.” Our present exploration and production activities outside of Brazil are described in “—Exploration and Production—Activities Abroad.” Also, see Note 15 to our audited consolidated financial statements for further information about our capitalized exploration costs and the unaudited supplementary information on oil and gas exploration and production contained in our audited consolidated financial statements.

<b>Number of Wells Being Drilled as of December 31, 2015</b>		
	<b>Year-end 2015</b>	
	<b>Gross</b>	<b>Net</b>
<b>Wells Drilling</b>		
<b>Consolidated Subsidiaries:</b>		
<b>Brazil</b>	34	29.375
<b>International:</b>		
South America (outside of Brazil)	9	5.6
North America	—	—
Africa	—	—
Others	—	—
Total International	9	5.6
Total consolidated	43	34.975
<b>Equity and non-consolidated affiliates:</b>		
South America (outside of Brazil)	1	0.4
Africa	—	—
<b>Total wells drilling</b>	<b>44</b>	<b>35.375</b>

The following table sets forth our average sales prices and average production costs by geographic area and by product type for the last three years.

	<b>Brazil</b>	<b>South America (outside of Brazil)</b>	<b>North America</b>	<b>Africa</b>	<b>Total (US\$)</b>	<b>Equity and non-consolidated affiliates(2)</b>
<b>During 2015</b>						
<i>Average sales prices</i>						
Oil, per barrel	42.16	65.96	45.31		42.60	51.77
Natural gas, per thousand cubic feet(1)	6.04	3.97	2.75		—5.77	—
Synthetic oil, per barrel	48.20	—	—		48.20	—
Synthetic gas, per thousand cubic feet	5.68	—	—		—5.68	—

Average production costs, per barrel – total	12.97	8.80	3.16	12.61	32.16
<b>During 2014</b>					
<i>Average sales prices</i>					
Oil, per barrel	87.84	79.28	90.31	87.64	100.62
Natural gas, per thousand cubic feet(1)	7.99	3.50	4.77	– 7.45	–
Synthetic oil, per barrel	92.63	–	–	92.63	–
Synthetic gas, per thousand cubic feet	9.68	–	–	– 9.68	–
Average production costs, per barrel – total	16.89	12.32	6.23	16.49	32.45
<b>During 2013</b>					
<i>Average sales prices</i>					
Oil, per barrel	98.19	82.82	99.29	107.88	97.72
Natural gas, per thousand cubic feet(1)	7.95	3.88	3.97	– 7.40	–
Synthetic oil, per barrel	99.54	–	–	99.54	–
Synthetic gas, per thousand cubic feet	8.24	–	–	– 8.24	–
Average production costs, per barrel – total	15.26	17.29	30.79	6.93	15.40

- 
- (1) The volumes of natural gas used in the calculation of this table are the production volumes of natural gas available for sale and are also shown in the production table above. Natural gas amounts were converted from bbl to cubic feet in accordance with the following scale: 1 bbl = 6 cubic feet.
- (2) Operations in Venezuela and in Africa-PO&G (2014 and 2013).





#### **Item 4A. Unresolved Staff Comments**

None.

#### **Item 5. Operating and Financial Review and Prospects**

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

The information derived from our financial statements as of and for the years ended December 31, 2015, 2014 and 2013 has been prepared in accordance with IFRS issued by the IASB. For more information, see "Presentation of Financial and Other Information" and Notes 2, 4 and 5 to our audited consolidated financial statements.

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-3 of this annual report.

##### **Overview**

We earn income from:

- domestic sales, which consist of sales of oil products (including diesel, gasoline, jet fuel, naphtha, fuel oil and liquefied petroleum gas), natural gas, ethanol, electricity and petrochemical products;
- export sales, which consist primarily of sales of crude oil and oil products;
- international sales (excluding export sales), which consist of sales of crude oil, natural gas and oil products that are purchased, produced and refined abroad; and
- other sources, including services, interest income from investments, share of earnings in equity-accounted investees, foreign exchange variation gains and inflation indexation gains on financial instruments.

Our expenses include:

- costs of sales (comprised of direct labor costs, operating costs and purchases of crude oil and oil products); property, plant and equipment maintenance and repairs; depreciation, depletion and amortization of property, plant and equipment, oil fields and signing bonuses (acquisition costs); and oil and gas exploration costs;

- selling (which include expenses for transportation and distribution of our products), general and administrative expenses;
- research and development;
- impairment of assets and other operating expenses; and
- interest expense, inflation indexation and foreign exchange variation losses on debt and other financial instruments.

Fluctuations in our financial condition and results of operations are driven by a combination of factors, including:

Table of Contents

- the volume of crude oil, oil products and natural gas we produce and sell;
- changes in international prices of crude oil and oil products (denominated in U.S. dollars);
- changes in the domestic prices of crude oil and oil products (denominated in *reais*);
- fluctuations in the *real* vs. U.S. dollar exchange rates and other currencies, as set out in Note 33.2(c) to our audited consolidated financial statements;
- the demand for oil products in Brazil and the amount of imports required to meet the domestic demand;
- the recoverable amounts of assets for impairment testing purposes; and
- the amount of production taxes from our operations that we are required to pay.

### Sales Volumes and Prices

The profitability of our operations in any particular accounting period is related to the sales prices and volumes of the crude oil, oil products, natural gas and biofuels that we sell and the relationship between these prices and international prices. Our consolidated net sales in 2015 totaled 1,402,739 mboe, representing US\$97,314 million in sales revenues, compared to 1,447,912 mboe, representing US\$143,657 million in sales revenues in 2014 and compared to 1,384,616 mboe, representing US\$141,462 million in sales revenues in 2013.

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, the price of oil products in Brazil has a more significant impact on our financial results than crude oil prices. International oil product prices vary over time as the result of many factors, including the price of crude oil. Over the long term, we intend to sell our products in Brazil at parity with international product prices. However, because we do not adjust our prices for gasoline, diesel and certain other oil products to reflect short-term volatility in the international markets, our downstream margins may be significantly different than those of other integrated international oil companies within a given financial reporting period due to significant rapid or sustained increases or decreases in the international prices of crude oil and oil products, or in the *real* vs. U.S. dollar exchange rate.

The average price of Brent crude oil, an international benchmark oil, was US\$52.46 per barrel in 2015, US\$98.99 per barrel in 2014 and US\$108.66 per barrel in 2013. In December 2015, Brent crude oil prices averaged US\$37.91 per barrel. Despite the sharp devaluation of the *real* throughout 2015, the average price of the Brent crude oil, when expressed in *reais*, also decreased to R\$172.65 per barrel during 2015 from R\$231.30 per barrel during 2014.

In 2013, we announced price increases at the refinery gate, totaling 10.9% for gasoline and 19.6% for diesel compared to December 31, 2012 prices. In November 2014, we announced further price increases at the refinery gate totaling 3% for gasoline and 5% for diesel compared to December 31, 2013 prices and in September 2015 we announced further price increases at the refinery gate totaling 6% for gasoline and 4% for diesel compared to December 31, 2014.

During 2015, 78% of our sales revenues were derived from sales of oil products, natural gas and other products in Brazil, compared to 77.7% in 2014 and 75.3% in 2013.

Table of Contents

	For the Year Ended December 31,								
	2015 Net			2014 Net			2013 Net		
	Volume	Average	Sales	Volume	Average	Sales	Volume	Average	Sales
	(mbl, except as otherwise noted)	Price (US\$)(1)	Revenues (US\$ million)	(mbl, except as otherwise noted)	Price (US\$)(1)	Revenues (US\$ million)	(mbl, except as otherwise noted)	Price (US\$)(1)	Revenues (US\$ million)
el	336,723	90.70	30,532	365,510	116.50	42,586	359,266	115.30	41,111
motive									
line	201,821	80.90	16,320	226,230	104.80	23,702	215,419	109.00	23,702
oil									
uding									
er fuel)	37,880	60.60	2,297	43,494	127.90	5,562	35,588	156.00	5,562
atha	48,404	53.60	2,594	59,443	62.70	3,729	62,520	63.30	3,729
efined									
roleum gas	84,592	34.10	2,881	85,723	65.60	5,622	84,281	69.80	5,622
el	40,187	82.70	3,325	40,285	108.20	4,357	38,751	89.40	3,325
r oil									
ucts	65,202	53.20	3,468	76,567	75.40	5,771	74,068	77.80	5,771
<b>total oil</b>									
<b>ucts</b>	<b>814,809</b>	<b>75.40</b>	<b>61,417</b>	<b>897,252</b>	<b>101.80</b>	<b>91,329</b>	<b>869,893</b>	<b>102.90</b>	<b>89,911</b>
ral gas									
)	157,815	37.30	5,894	162,633	49.40	8,035	149,277	49.40	7,911
anol,									
gen									
ucts,									
wables									
other									
oil									
ucts	45,063	85.80	3,868	36,181	106.70	3,862	33,346	146.00	4,000
ricity,									
ces and									
rs	–	–	4,850	–	–	8,384	–	–	4,850
<b>l</b>									
<b>estic</b>									
<b>ket</b>	<b>1,017,687</b>	–	<b>76,029</b>	<b>1,096,066</b>	–	<b>111,610</b>	<b>1,052,516</b>	–	<b>106,000</b>
rts	186,060	52.10	9,692	143,423	97.10	13,930	144,111	105.30	15,000
national									
s	198,992	58.30	11,593	208,423	86.90	18,117	187,989	105.50	19,000
<b>l</b>									
<b>ernational</b>									
<b>ket</b>	<b>385,052</b>	–	<b>21,285</b>	<b>351,846</b>	–	<b>32,047</b>	<b>332,100</b>	–	<b>34,000</b>
	<b>1,402,739</b>	–	<b>97,314</b>	<b>1,447,912</b>	–	<b>143,657</b>	<b>1,384,616</b>	–	<b>141,000</b>

**Consolidated  
Sales  
Revenues**

---

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

## Effect of Taxes on Our Income

In addition to taxes paid on behalf of consumers to federal, state and municipal governments, such as the Domestic Value-Added Tax (*Imposto sobre Circulação de Mercadorias e Serviços*), we are required to pay three main charges on our oil production activities in Brazil: royalties, special participation and retention bonuses. See Item 4. “Information on the Company—Regulation of the Oil and Gas Industry in Brazil—Taxation under Concession Regime for Oil and Gas” and Item 3. “Key Information—Risk Factors—Risks Relating to Brazil.” These charges imposed by the Brazilian federal government are included in our cost of sales.

In addition, we are also subject to tax on our income at an effective rate of 34%, including 25% of corporate income tax and a social contribution tax at an effective rate of 9%, the standard corporate tax rates in Brazil. In 2015, we recognized additional income tax expenses as the result of recently enacted Brazilian tax regulations imposing income tax on the income generated by our foreign subsidiaries.

## Inflation and Exchange Rate Variation

### *Inflation*

Since the introduction of the *real* as the Brazilian currency in July 1994, except for 2015, inflation in Brazil has remained relatively stable. Inflation was 10.67% in 2015, 6.41% in 2014 and 5.91% in 2013 as measured by IPCA, the National Consumer Price Index. Inflation has had, and may continue to have, effects on our financial condition and results of operations. See Item 3. “Key Information—Risk Factors—Inflation, and the Brazilian government’s measures to combat inflation, may contribute significantly to economic uncertainty in Brazil, and may materially adversely affect us.”

### *Exchange Rate Variation*

Our main functional currency is the Brazilian *real*, which is the functional currency of Petrobras and its Brazilian subsidiaries and our presentation currency is the U.S. dollar. Therefore, we maintain our financial records in *reais*, and translate our financial statements into U.S. dollars for presentation purposes based on the average exchange rates prevailing during the period or at the balance sheet date, pursuant to the criteria set out in IAS 21 - "The effects of changes in foreign exchange rates".

When the *real* appreciates relative to the U.S. dollar, the effect is to generally increase both revenues and expenses when expressed in U.S. dollars. When the *real* depreciates relative to the U.S. dollar, the effect is to generally decrease revenues and expenses when expressed in U.S. dollars.

From 2003 to 2011, considering the average exchange rates of each year, the *real* appreciated against U.S. dollar each year (by an average of 7% per year), except for 2009 (when it depreciated by 9%). In 2015, the *real* depreciated 42% against the U.S. dollar, compared to depreciation of 9.1% in 2014, 10.4% in 2013 and depreciation of 16.7% in 2012. Through April 22, 2016, the *real* has rebounded, appreciating by 8.2% compared to December 31, 2015.

Fluctuations in exchange rate have multiple effects on our results of operations in *reais*. The relative pace at which our total revenues and expenses in *reais* increase or decrease with the exchange rate, and its impact on our margins, is affected by our pricing policy in Brazil. Absent changes in the international prices for crude oil, oil products and natural gas, when the *real* appreciates against the U.S. dollar and we do not adjust our prices in Brazil, our margins generally improve. Absent changes in the international prices for crude oil, oil products and natural gas, when the *real* depreciates against the U.S. dollar and we do not adjust our prices in Brazil, margins generally decline.

The depreciation of the *real* against the U.S. dollar also increases our debt service in *reais*, as the amount of *reais* necessary to pay principal and interest on foreign currency debt increases with the depreciation of the *real*. A devaluation of the *real* also increases our costs to import oil and oil products, imported goods and services necessary for our operations and our production taxes. Unless the depreciation of the *real* is offset by higher prices for our products sold in Brazil, a devaluation increases our debt service relative to our cash flows while also reducing our operating margins.

The foreign exchange variations on foreign-denominated assets and liabilities of entities for which the *real* is the functional currency are recorded in profit or loss, while the foreign exchange variations on the translation to the presentation currency are recognized in other comprehensive income in shareholders' equity. As our net debt denominated in other currencies increases, the negative impact of a depreciation of the *real* on our results and net income when expressed in *reais* also increases, thereby reducing the earnings available for distribution. Note 33.2(c) to our audited consolidated financial statements provides further



information about our foreign exchange exposure related to assets and liabilities.

Since mid-May 2013 we have designated cash flow hedging relationships in which (a) the hedged items are portions of our highly probable future monthly export revenues in U.S. dollars, (b) the hedging instruments are portions of our long-term debt obligations denominated in U.S. dollars, and (c) the risk hedged is the effect of changes in exchange rates between the U.S. dollar and our functional currency, the Brazilian *real*. Both long-term debt obligations (hedging instruments) and future exports (hedged items) are exposed to the *real*/U.S. dollar foreign currency risks at their respective spot exchange rate. Cash flow hedge accounting allows gains and losses arising from the effect of changes in the foreign currency exchange rate on the hedging instruments to be recognized in other comprehensive income in shareholders' equity and then reclassified from equity to profit or loss in the periods during which the hedged transactions occur, rather than being immediately recognized as profits or losses. See “—Critical Accounting Policies and Estimates—Cash Flow Hedge Accounting Involving our Future Exports” and Notes 4.3.6 and 33.2(a) to our audited consolidated financial statements for further information about our cash flow hedge.

Table of Contents

Exchange rate variation also affects the amount of retained earnings available for distribution by us when expressed in U.S. dollars. Amounts reported as available for distribution in our statutory accounting records are calculated in *reais* and prepared in accordance with the IFRS and they may increase or decrease when expressed in U.S. dollars as the *real* appreciates or depreciates against the U.S. dollar.

**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 relationship of those prices to the international prices; the level and cost of imports and exports needed to satisfy our demand; production taxes; and the differential between Brazilian and international inflation rates, adjusted by 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. Production volumes presented in this table are prepared in accordance with SPE criteria, which are the criteria we apply to analyze our operating results:

	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Crude oil and NGL production (mmbbl/d):</b>			
Brazil	2,128	2,034	1,931
International	69	85	109
Non-consolidated international production(1)	30	31	19
Total crude oil and NGL production	<b>2,227</b>	<b>2,150</b>	<b>2,059</b>
Change in crude oil and NGL production	3.6%	4.4%	(3.2)%
<b>Average sales price for crude oil (US\$/barrel):</b>			
Brazil	42.16	87.84	98.19
International	55.99	82.93	89.86
<b>Natural gas production (mmcf/d)(2):</b>			
Brazil	2,814	2,556	2,334
International	546	558	546
Total natural gas production	<b>3,360</b>	<b>3,114</b>	<b>2,880</b>
Change in natural gas production (sold only)	7.9%	8.1%	1.7%
<b>Average sales price for natural gas (US\$/mcf)(2):</b>			
Brazil	6.04	7.99	7.95
International	3.77	3.53	3.51
Year-end exchange rate ( <i>reais</i> /US\$)	3.90	2.66	2.34
Appreciation (depreciation) during the year(3)	(47.0)%	(13.4)%	(14.8)%
Average exchange rate for the year ( <i>reais</i> /US\$)	3.3	2.35	2.16
Appreciation (depreciation) during the year(4)	(41.5)%	(9.1)%	(10.4)%
Inflation rate (IPCA)	10.67%	6.41%	5.91%

(1) Non-consolidated companies in Venezuela and in Africa.

(2) Amounts were converted from bbl to cubic feet in accordance with the following scale: 1 bbl = 6 cubic feet. They do not include LNG but include reinjected gas.

(3) Based on year-end exchange rate (R\$/US\$)

(4) Based on average exchange rate for the year (R\$/US\$)

Virtually all of our revenues and expenses for our Brazilian operations are denominated and payable in *reais*. When the *real* weakens relative to the U.S. dollar, as it did in 2015, 2014 and 2013 (with a depreciation of 41.5%, 9.1% and 10.4%, respectively), revenues and expenses decrease when translated into U.S. dollars. The appreciation of the U.S. dollar against the *real* affects the line items discussed below in different ways. As a consequence, the following comparison between our results of operations in 2015 and in 2014, and between our results of operations in 2014 and 2013, are impacted by the depreciation of the *real* against the U.S. dollar during that period. See Note 2 of our audited consolidated financial statements for the year ended December 31, 2015 for more information about the translation of *real* amounts into U.S. dollars.

## Results of Operations—2015 compared to 2014

### Sales Revenues

Sales revenues decreased by 32% to US\$97,314 million in 2015 from US\$143,657 million in 2014, driven primarily by:

- Decreased domestic demand for oil products (9%), reflecting lower economic activity in Brazil;
- Lower crude oil and oil product export prices;
- Decreased domestic prices of naphtha, jet fuel and fuel oil; and
- Foreign currency translation effects (depreciation of the *real* against the U.S. dollar) which reduced our sales revenues when expressed in U.S. dollars. Excluding these effects, sales revenues decreased by 5% when expressed in *reais*.

These effects were partially offset by higher diesel and gasoline prices, following price increases in November 2014 and September 2015, as well as higher crude oil export volumes (55%) attributable to an increase in domestic crude oil production (5%) and to a decrease in feedstock processed by our domestic refineries (6%).

### Cost of Sales

Cost of sales decreased by 38% to US\$67,485 million in 2015 from US\$109,477 million in 2014, mainly due to:

- Lower crude oil and oil product import unit costs, as well as lower production taxes;
- Decreased crude oil imports on feedstock processing and a lower share of oil product imports in the sales mix as a result of lower domestic demand for oil products;
- Foreign currency translation effects (depreciation of the *real* against the U.S. dollar) which reduced the cost of sales when expressed in U.S. dollars. Excluding these effects, cost of sales decreased by 13% when expressed in *reais*.

These effects were partially offset by an increase in depreciation expenses.

### Selling Expenses

Selling expenses decreased by 32% to US\$4,627 million in 2015 from US\$6,827 million in 2014, mainly due to foreign currency translation effects (depreciation of the *real* against the U.S. dollar) which reduced the selling expenses when expressed in U.S. dollars. Excluding those effects, selling expenses remained relatively flat when expressed in *reais*.

### *General and Administrative Expenses*

General and administrative expenses decreased by 30% to US\$3,351 million in 2015 from US\$4,756 million in 2014, mainly due to foreign currency translation effects (depreciation of the *real* against the U.S. dollar). Excluding those effects, general and administrative expenses remained relatively flat when expressed in *reais*. See Item 6. “Directors, Senior Management and Employees—Employees and Labor Relations.”

### *Exploration Costs*

Exploration costs decreased by 38% to US\$1,911 million in 2015 from US\$3,058 million in 2014, primarily due to lower geological and geophysical expenses and foreign currency translation effects (depreciation of the *real* against the U.S. dollar). A breakdown of our exploration costs by nature is set out in Note 15 to our audited consolidated financial statements.

### *Research and Development Expenses*

Research and development expenses decreased by 43% to US\$630 million in 2015 from US\$1,099 million in 2014, driven by the decrease in gross revenues from high productivity oil fields in Brazil, since the ANP requires that we invest at least 1% of our gross revenues originating from those fields in research and development projects, and also a result of foreign currency translation effects (depreciation of the *real* against the U.S. dollar). See Item 5. “Operating and Financial Review and Prospects—Research and Development” for further details about our research and development activities.

### *Other taxes*

Other taxes increased by 268% in 2015 (US\$2,796 million) when compared to 2014 (US\$760 million), primarily due to higher tax expenses attributable to our decision to benefit from the Federal Tax Amnesty and Refinancing Program (*Programa de Recuperação Fiscal*) and State Tax Amnesty Programs (US\$2,036 million). See Note 21 to our audited consolidated financial statements.

### *Impairment of Assets*

We recognized impairment charges of US\$12,299 million in 2015, mainly due to:

- a decline in international crude oil prices;
- decrease in estimates of proved and probable reserves;
- postponement of certain projects as a result of a downward revision of our projected capital expenditures;
- revision of geological characteristics of the Papa-Terra field reservoir; and
- higher discount rates used to measure the value-in-use of our assets and CGUs driven by an increase in Brazil’s risk premium.

Impairment losses were primarily related to domestic and international crude oil and natural gas producing properties (US\$9,290 million) and to the domestic refinery *Complexo Petroquímico do Rio de Janeiro – Comperj* (US\$1,352 million).

Impairment losses in 2015 were 27% lower when compared to 2014 due to the foreign currency translation effects (depreciation of the *real* against the U.S. dollar). Excluding these effects, when expressed in *reais*, impairment losses increased by 7% when compared to the impairment losses recognized in 2014, which were mainly related to domestic refineries, domestic and international crude oil and natural gas producing properties and petrochemical assets. See Notes 4.10, 5.2 and 14 to our audited consolidated financial statements for more information about the impairment of our assets.



### *Write-Offs of Overpayments Incorrectly Capitalized*

In 2014, we wrote off US\$2,527 million of capitalized costs representing amounts that we overpaid for the acquisition of property, plant and equipment in prior years resulting from a payment scheme uncovered by the Brazilian Federal Prosecutor's Office in connection with the Lava Jato investigation. We closely monitored the progress of this investigation throughout 2015 and no new facts were discovered that could materially impact our previously recorded write-off or change the methodology adopted with respect to the write-off. See Note 3 to our 2015 audited consolidated financial statements for more information about the Lava Jato investigation.

### *Other Expenses, Net*

Other expenses, net remained relatively flat in 2015 (US\$5,345 million) when compared to 2014 (US\$5,293 million). Excluding foreign currency translation effects (depreciation of the *real* against the U.S. dollar), other expenses, net increased by 53%, primarily due to (i) higher legal proceedings expenses, mainly related to tax and labor claims and (ii) higher expenses in connection with pension and medical benefits, as a result of an increase in our net actuarial liability for the fiscal year ended December 31, 2014, attributable to the actuarial valuation review of our pension and medical benefits and the use of a lower discount rate.

### *Net Finance Income (Expense)*

Net finance expense was US\$8,441 million in 2015, a US\$6,806 million increase compared to 2014 (US\$1,635 million), resulting from:

- Higher interest expenses (US\$2,514 million) attributable to: (i) an increase in our net debt (US\$124 million); (ii) a decrease in the level of capitalized borrowing costs due to a lower balance of assets under construction, reflecting relevant projects concluded during 2014, as well as write-offs of assets and impairment losses recognized in the fiscal year ended December 2014 (US\$1,827 million); and (iii) interest expenses (US\$768 million) related to tax expenses attributable our decision to benefit from the Tax Amnesty and Refinancing Program (*Programa de Recuperação Fiscal*);
- Foreign exchange losses caused by the impact of a 47% depreciation of the *real* against the U.S. dollar in 2015 on our net debt (compared to a 13.4% depreciation in 2014), partially offset by the application of our cash flow hedge accounting; and
- Foreign exchange losses caused by the impact of a 31.7% depreciation of the *real* against the Euro on our net debt (compared to a 0.02% depreciation in 2014).

### *Income Taxes*

We reported a loss for the fiscal year ended December 31, 2015, and consequently recognized tax loss carryforwards for that period. The effective tax rate based on the results

expressed in U.S. dollars decreased to 11.7% in 2015 from 15.0% in 2014. Excluding foreign currency translation effects (depreciation of the *real* against the U.S. dollar), the effective tax rate when expressed in *reals* remained relatively flat in 2015 (14.7%) when compared to 2014 (15.1%). In 2015, the main reconciliation items between statutory corporate tax rates and our effective tax rate refer to (i) additional income taxes on income of our foreign subsidiaries attributable to amendments to Brazilian tax law; (ii) nontaxable income (deductible expenses) mainly related to results in equity-accounted investments and our health care plan actuarial liability expenses and (iii) tax loss carryforwards (unrecognized tax losses) according to a non-expectation of future taxable profit for certain subsidiaries. See Note 21.7 to our audited consolidated financial statements for a reconciliation of statutory tax rates and our tax expense.

### ***Net Income (Loss) by Business Segment***

We measure performance at the business segment level based on net income. The following is a discussion of the net income (loss) of our five business segments for 2015, compared to 2014. In the fourth quarter of 2015, we changed our reportable business segments to reflect the reallocation of our international activities into the business segment to which the underlying activities correspond, thus reducing our reportable business segments from six to five. For comparative purposes, business segment results for the fiscal year ended December 31, 2014 are presented based on this new business segment structure.

See Item 4. "Information on the Company" and Notes 4.2 and 29 to our 2015 audited consolidated financial statements for more information about our business segments.

**Year Ended December 31,**

<b>2015(1)</b>	<b>2014(1)</b>	<b>Percentage Change</b>
----------------	----------------	------------------------------

**(US\$ million)**

Exploration and Production	(2,480)	14,151	(118)%
----------------------------	---------	--------	--------

Refining, Transportation and Marketing	5,727	(15,761)	(136)%
--	-------	----------	--------

Gas and Power	237	(347)	(168)%
---------------	-----	-------	--------



Biofuel

(276)

(127)

117%

Distribution	(142)	565	(125)%
--------------	-------	-----	--------

Corporate(2)

(11,816)

(6,292)

88%

Eliminations	300	444	(32)%
--------------	-----	-----	-------

Net income	(8,450)	(7,367)	15%
------------	---------	---------	-----

---

(1) Excluding non-controlling interests.

- (2) Our Corporate segment comprises our financing activities not attributable to other segments, including corporate financial management, central administrative overhead and actuarial expenses related to our pension and medical benefits for retirees.

### *Exploration and Production*

Loss in our Exploration and Production segment was US\$2,480 million in 2015 compared to a net income of US\$14,151 million in 2014. This loss was mainly attributable to the lower crude oil sales/transfer prices, reflecting the recent decline in international crude oil prices and to the impairment of domestic and international crude oil and natural gas producing properties (US\$9,290 million). See Note 14 to our 2015 audited consolidated financial statements for further information about our impairment losses. These effects were partially offset by a 4% increase in crude oil and NGL production and by the appreciation of the U.S. dollar against the real.

See Item 4. "Information on the Company—Additional Reserves and Production Information—Changes in Proved Reserves" for information on changes in our proved reserves.

### *Refining, Transportation and Marketing*

Net income in our Refining, Transportation and Marketing segment (RT&M) was US\$5,727 million in 2015, compared to a US\$15,761 million loss in 2014, attributable to: (i) decrease in crude oil purchase/transfer costs due to lower crude oil international prices; (ii) lower share of crude oil imports on our feedstock processing and oil product imports in our sales mix; and (iii) higher diesel and gasoline prices, reflecting price increases in November 2014 and in September 2015.

These effects were partially offset mainly by the decreased oil product domestic demand as a result of lower economic activity in Brazil, the impairment charges recognized for COMPERJ's refining assets (US\$1,352 million) and also by foreign currency translation effects (depreciation of the *real* against the U.S. dollar).



Table of Contents

The improved result in our RT&M segment also reflects (i) non-recurrent charges recognized in 2014 (such as the write-offs of overpayments incorrectly capitalized (US\$1,403 million) and the write-off of capitalized costs in Premium I and Premium II refineries (US\$1,236 million)), as well as (ii) lower recognition of impairment charges in 2015 (US\$1,664 million) as compared to 2014 (US\$12,912 million).

### *Gas and Power*

Net income was US\$237 million in 2015 compared to a US\$347 million loss in 2014, attributable to (i) lower natural gas import acquisition costs (LNG and Bolivian gas); (ii) increase in natural gas sales margins, resulting from higher natural gas average prices; and (iii) lower impairment of trade receivables from companies in the isolated electricity sector in the Northern region of Brazil (see Note 8.4 to our audited consolidated financial statements).

These effects were partially offset by a decrease of electricity prices in the spot market, impairment losses recognized for Nitrogen Fertilizers Plants III and V (see Note 14 to our audited consolidated financial statements), higher tax expenses related to VAT tax on natural gas due to our decision to benefit from State tax amnesty programs (see Note 21.3 to our audited consolidated financial statements) and foreign currency translation effects (depreciation of the *real* against the U.S. dollar).

### *Biofuel*

Loss in Biofuel segment increased by 117% to US\$276 million in 2015 from US\$127 million in 2014, driven by impairment charges in ethanol and biodiesel investees (US\$139 million) and to impairment charges in biodiesel plants, as a result of the worsening in market conditions and of higher discount rate due to Brazil's higher risk premium (US\$46 million). See Note 14 to our audited consolidated financial statements for more information regarding our impairment charges.

These effects were partially offset by foreign currency translation effects (depreciation of the *real* against the U.S. dollar).

### *Distribution*

Loss was US\$142 million in 2015 compared to a net income of US\$565 million in 2014, mainly due to foreign currency translation effects (depreciation of the *real* against the U.S. dollar), to lower domestic sales volumes (7%), increased losses with trade receivables from companies that operate in the isolated electricity sector in the Northern region of Brazil (see Note 8.4 to our 2014 audited consolidated financial statements) and impairment of assets.

## **Results of Operations—2014 compared to 2013**

### Sales Revenues

Sales revenues increased by 2% to US\$143,657 million in 2014 from US\$141,462 million in 2013, driven primarily by:

- Higher oil product prices in the domestic market, due to diesel and gasoline price increases applied in 2013 and 2014, and to the impact of the appreciation of the U.S. dollar against the *real* (9%) on the price (in *reais*) of oil products that are adjusted to reflect international prices (such as jet fuel and naphtha), as well as higher electricity and natural gas prices;
- A 3% increase in the domestic demand for oil products, mainly diesel (2%), gasoline (5%) and fuel oil (21%), and an increase in crude oil export volumes (12%), partially offset by a decrease in oil product export volumes (15%); and

Table of Contents

- Foreign currency translation effects (appreciation of the U.S. dollar against the *real*), which reduced the increase of sales revenues in U.S. dollars. Excluding those effects, sales revenues increased by 11% when expressed in *reais*.

### *Cost of Sales*

Cost of sales increased by 1% to US\$109,477 million in 2014 from US\$108,834 million in 2013, mainly due to:

- Higher import costs and production taxes attributable to the depreciation of the *real*;
- Increased domestic oil products sales volumes (3%) and increased LNG import volumes to meet the demand; and
- Higher electricity costs as a result of increased electricity prices in the spot market.

Excluding the impact of foreign currency translation effects (appreciation of the U.S. dollar against the *real*), cost of sales increased by 9% when expressed in *reais*.

### *Selling Expenses*

Selling expenses increased by 39% to US\$6,827 million in 2014 from US\$4,904 million in 2013, mainly due to an allowance for impairment of trade receivables from the isolated electricity sector in the Northern region of Brazil (amounting to US\$1,948 million) primarily to cover certain trade receivables due by Eletrobras's subsidiaries. See Note 8.4 to our audited consolidated financial statements for the fiscal year ended December 31, 2014.

### *General and Administrative Expenses*

General and administrative expenses decreased by 5% to US\$4,756 million in 2014 from US\$4,982 million in 2013 mainly due to foreign currency translation effects. Excluding those effects, general and administrative expenses increased by 4% when expressed in *reais*, mainly as a result of higher employee compensation expenses arising from the 2013 and 2014 collective bargaining agreements. See Item 6. "Directors, Senior Management and Employees—Employees and Labor Relations."

### *Exploration Costs*

Exploration costs increased by 3% to US\$3,058 million in 2014 from US\$2,959 million in 2013, primarily due to an increase in write-offs of dry or sub-commercial wells. A breakdown of exploration costs by nature is set out in Note 15 to our audited consolidated financial statements.

### *Research and Development Expenses*

Research and development expenses decreased by 3% to US\$1,099 million in 2014 from US\$1,132 million in 2013, mainly due to foreign currency translation effects. Excluding those effects, research and development expenses were 7% higher when expressed in *reais*. That increase was due to an increase in gross revenues from high productivity oil fields in Brazil, since the ANP requires that we invest at least 1% of our gross revenues originating from those fields in research and development projects, and also a result of higher expenditures in research and development for projects in Brazil. See Item 5. "Operating and Financial Review and Prospects—Research and Development" for further details about our research and development activities.

### *Impairment of Assets*

We recognized impairment charges of US\$16,823 million in 2014, mainly related to the following assets:

- Domestic refineries (US\$11,662 million): These charges resulted from individualized impairment testing of the second refining unit of Refinaria Abreu e Lima (RNEST) and Complexo Petroquímico do Rio de Janeiro (Comperj) conducted due to the postponement of each of these projects for an extended period of time. Those postponements were implemented as part of our measures to preserve cash and in response to the difficulties created for our suppliers by the “Lava Jato” investigation. The impairment charges are mainly attributable to project planning deficiencies, the use of a higher discount rate (reflecting a specific risk premium for the postponed projects), a delay in expected cash inflows resulting from postponing these projects and lower projected economic growth in Brazil;
- Domestic and international crude oil and natural gas producing properties (US\$3,766 million): these charges mainly result from lower international crude oil prices; and
- Petrochemical assets (US\$1,121 million): these charges are mainly attributable to changes in market assumptions and forecasts resulting from a decrease in economic activity, lower margins in the international market and modifications in tax regulations.

See Notes 4.10, 5.2 and 14 to our audited consolidated financial statements for more information about the impairment of these assets.

### *Write-Offs of Overpayments Incorrectly Capitalized*

In the quarter ended September 30, 2014, we wrote off US\$2,527 million of capitalized costs representing amounts that we overpaid for the acquisition of property, plant and equipment in prior years resulting from a payment scheme uncovered by the Brazilian Federal Prosecutor’s Office in connection with the Lava Jato investigation. See Note 3 to our audited consolidated financial statements for a detailed description of this investigation, the overpayments charged by certain contractors and suppliers to Petrobras and our response to it, sources of information available to us, our methodology to estimate the overstatement of our assets and the impact of these overpayments on our financial statements.

### *Other Expenses, Net*

Other expenses, net increased by 376% to US\$5,293 million in 2014 from US\$1,113 million in 2013. This US\$4,180 million increase primarily relates to:

- The write-off of the capitalized costs of Premium I and Premium II refineries due to our decision to abandon these projects (US\$1,236 million). See Note 12.4 to our audited consolidated financial statements for the fiscal year ended December 31, 2014;

- The impact of our Voluntary Separation Incentive Plan – PIDV (US\$1,035 million). See Note 22.8 to our audited consolidated financial statements for the fiscal year ended December 31, 2014;
- Higher decommissioning costs related to returned and abandoned areas (US\$501 million);
- The write-off of exploration and production areas returned to ANP and cancelled exploration and production projects (US\$249 million); and

Table of Contents

- Higher actuarial expenses related to retirees due to the review of our pension and medical benefit obligations (US\$130 million).

Other expenses were also higher in 2014 when compared to 2013, primarily because we recognized gains from the disposal of 50% of our interest in assets in Africa and of block BC-10 in Brazil in 2013 (which did not occur in 2014). Those effects were partially offset by a gain on disposal of our interest in Petrobras Energia Peru S.A. in 2014.

### *Net Finance Income (Expense)*

Net finance expense was US\$1,635 million in 2014, a US\$1,156 million decrease compared to 2013 (US\$2,791 million) resulting from:

- A decrease in foreign exchange variation charges, because a smaller portion of our liabilities in U.S. dollars was exposed to exchange rate variation due to the extension of our cash flow hedge accounting policy to highly probable future exports, beginning in May 2013. For further information about our cash flow hedge accounting, see Notes 4.3.6 and 33.2(a) to our audited consolidated financial statements;
- Foreign exchange gains attributable to the appreciation of the U.S. dollar against other currencies, mainly the Euro;
- Inflation indexation gains on a contingent asset related to undue finance income – PIS and COFINS taxes paid by us from February 1999 to December 2002; and
- Inflation indexation gains on debt acknowledgement agreements with respect to trade receivables due by Eletrobras's subsidiaries.

Finance expenses were also lower in 2014 when compared to 2013, mainly because in 2013 we recognized the effects of the settlement of certain of our tax debts and disputes through our participation in a federal tax refinancing/settlement program, which increased our finance expense significantly in 2013 and was not recurring in 2014.

Those effects were partially offset by higher interest expenses resulting from an increase in our debt.

### *Income Taxes*

We reported a loss for the fiscal year ended December 31, 2014, and consequently recognized tax loss carryforwards for that period. The effective tax rate based on the results expressed in U.S. dollars decreased to 15.0% in 2014 from 19.2% in 2013. Excluding foreign currency translation effects (depreciation of the real against the U.S. dollar), the effective tax rate when expressed in *reais* decreased to 15.1% in 2014 from 18.3% in 2013. In 2014, the main reconciliation items between statutory corporate tax rates and our effective tax rate refer to (i) tax loss carryforwards (unrecognized tax losses) according to a non-expectation of

future taxable profit for certain subsidiaries; (ii) write-off of overpayments incorrectly capitalized and (iii) different jurisdictional tax rates applicable to our foreign subsidiaries. See Note 21.7 to our audited consolidated financial statements for a reconciliation of statutory tax rates and our tax expense.



### ***Net Income (Loss) by Business Segment***

We measure performance at the business segment level based on net income. The following is a discussion of the net income of our five business segments for 2014, compared to 2013. In the fourth quarter of 2015, we changed our reportable business segments to reflect the reallocation of our international activities into the business segment to which the underlying activities correspond, thus reducing our reportable business segments from six to five. For comparative purposes, business segment results for the fiscal years ended December 31, 2014 and 2013 are presented based on this new business segment structure. See Item 4. "Information on the Company" and Notes 4.2 and 29 to our audited consolidated financial statements for more information about our business segments.

**Year Ended December 31,**

<b>2014(1)</b>	<b>2013(1)</b>	<b>Percentage Change</b>
----------------	----------------	------------------------------

**(US\$ million)**

Exploration and Production	14,151	21,009	(33)%
----------------------------	--------	--------	-------

Refining, Transportation and Marketing	(15,761)	(8,157)	93%
--	----------	---------	-----

Gas and Power	(347)	678	(151)%
---------------	-------	-----	--------

Biofuel

(127)

(115)

10%

Distribution	565	931	(39)%
--------------	-----	-----	-------



Corporate(2)	(6,292)	(3,198)	97%
--------------	---------	---------	-----

Eliminations	444	(54)	(922)%
--------------	-----	------	--------

Net income	(7,367)	11,094	(166)%
------------	---------	--------	--------

---

(1) Excluding non-controlling interests.

- (2) Our Corporate segment comprises our financing activities not attributable to other segments, including corporate financial management, central administrative overhead and actuarial expenses related to our pension and medical benefits for retirees.

### *Exploration and Production*

Net income in our Exploration and Production segment decreased by 33% to US\$14,151 million in 2014 compared to US\$21,009 million in 2013, mainly due to (i) impairment charges recognized in 2014 (US\$3,800 million - see Note 14 to our audited consolidated financial statements for the fiscal year ended December 31, 2014); (ii) write-offs of overpayments incorrectly capitalized (US\$806 million – see Note 3 to our audited consolidated financial statements for the fiscal year ended December 31, 2014); (iii) the impact of our voluntary separation incentive plan (PIDV) (US\$416 million); (iv) higher decommissioning costs on returned and abandoned areas (US\$501 million); (v) write-offs of exploration and production areas returned to the ANP (US\$249 million) and (vi) higher operating costs, such as equipment depreciation, equipment maintenance, interventions on wells, oil platform chartering, materials and increased employee compensation costs.

These effects were partially offset by higher crude oil and NGL production (5%) and, when compared to 2013, by the fact that in 2013 we recognized a gain on the disposal of Parque das Conchas offshore project (BC-10).

The spread between the average domestic oil price (sale/transfer) and the average Brent crude oil price increased from US\$10.47/bbl in 2013 to US\$11.15/bbl in 2014.

See Item 4. “Information on the Company—Additional Reserves and Production Information—Changes in Proved Reserves” for information on changes in our proved reserves.

*Refining, Transportation and Marketing*

Losses in our Refining, Transportation and Marketing segment increased by 93% to US\$15,761 million in 2014 compared to US\$8,157 million in 2013, as a result of: (i) impairment charges recognized in 2014 (US\$12,912 million – see Note 14 to our audited consolidated financial statements for the fiscal year ended December 31, 2014); (ii) write-offs of overpayments incorrectly capitalized (US\$1,403 million – see Note 3 to our audited consolidated financial statements for the fiscal year ended December 31, 2014); (iii) the write-off of capitalized costs in Premium I and Premium II refineries (US\$1,236 million – see Note 12.4 to our audited consolidated financial statements for the fiscal year ended December 31, 2014); and (iv) the impact of our voluntary separation incentive plan (PIDV).

Those effects were partially offset by higher average oil product selling prices attributable to diesel and gasoline price increases in 2013 and 2014, and by an increase in oil product production (2%).

*Gas and Power*

Our Gas and Power segment reported a loss of US\$347 million in 2014 compared to a net income of US\$678 million in 2013, resulting from:

- Higher LNG and natural gas import costs to meet thermoelectric demand in Brazil;
- The impact of an agreement with YPF to settle contractual disputes regarding several aspects of the GSA. See Note 31 to our audited consolidated financial statements for the fiscal year ended December 31, 2014;
- An allowance for impairment of trade receivables from companies that operate in the isolated electricity sector in the Northern region of Brazil (see Note 8.4 to our audited consolidated financial statements for the fiscal year ended December 31, 2014);
- Write-offs of overpayments incorrectly capitalized; and
- The impact of our voluntary separation incentive plan (PIDV).

These effects were partially offset by higher average electricity prices in the spot market, as a result of lower water reservoir levels in Brazil, and by a US\$274 million gain from the disposal of 100% of our interest in Brasil PCH S.A.

*Biofuel*

Biofuel segment losses increased by 10% to US\$127 million in 2014 compared to US\$115 million in 2013, mainly due to the higher share of losses from biodiesel investees and to the impact of our voluntary separation incentive plan (PIDV). These effects were partially offset by lower losses on biodiesel operations and by a decrease in inventory write-downs to net realizable value (market value).

*Distribution*

Net income in our Distribution segment decreased by 39% to US\$565 million in 2014 compared to US\$931 million in 2013, mainly due to higher selling expenses attributable to an allowance for impairment of trade receivables from companies that operate in the isolated electricity sector in the Northern region of Brazil (see Note 8.4 to our audited consolidated financial statements for the fiscal year ended December 31, 2014) and to the impact of our voluntary separation incentive plan (PIDV), partially offset by an increase in sales volumes and higher average margins in fuel trading.

See Note 29 to our audited consolidated financial statements for further information regarding our business segments.



Table of Contents**Additional Business Segment Information**

Additional selected financial data by business segment for 2015, 2014 and 2013 is set out below:

	<b>For the Year Ended December</b>		
	<b>31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
<b>Exploration and Production</b>			
Sales revenues to third parties(1)(2)	1,502	2,275	2,872
Intersegment net revenues	34,178	66,336	69,473
Total sales revenues(2)	35,680	68,611	72,345
Net income (loss)(3)	(2,480)	14,151	21,009
Capital expenditures and investments(4)	19,131	25,500	29,692
Property, plant and equipment	109,724	140,582	133,309
<b>Refining, Transportation and Marketing</b>			
Sales revenues to third parties(1)(2)	51,870	78,947	80,938
Intersegment sales revenues	22,451	35,484	33,393
Total sales revenues(2)	74,321	114,431	114,331
Net income (loss)(3)	5,727	(15,761)	(8,157)
Capital expenditures and investments(4)	2,534	7,882	14,399
Property, plant and equipment	33,032	50,273	67,297
<b>Gas and Power</b>			
Sales revenues to third parties(1)(2)	11,072	16,643	13,344
Intersegment sales revenues	2,073	1,730	1,228
Total sales revenues(2)	13,145	18,373	14,572
Net income (loss)(3)	237	(347)	678
Capital expenditures and investments(4)	793	2,571	2,742
Property, plant and equipment	14,674	22,237	21,011
<b>Biofuel</b>			
Sales revenues to third parties(1)(2)	16	28	64
Intersegment sales revenues	213	238	324
Total sales revenues(2)	229	266	388
Net income (loss)(3)	(276)	(127)	(115)
Capital expenditures and investments(4)	43	112	143
Property, plant and equipment	91	205	222
<b>Distribution</b>			
Sales revenues to third parties(1)(2)	32,854	45,764	44,244
Intersegment sales revenues	552	1,129	1,000
Total sales revenues(2)	33,406	46,893	45,244
Net income (loss)(3)	(142)	565	931
Capital expenditures and investments(4)	255	487	566
Property, plant and equipment	1,868	2,685	2,790

- (1) As a vertically integrated company, not all of our segments have significant third-party revenues. For example, our Exploration and Production segment accounts for a large part of our economic activity and capital expenditures, but has little third-party revenues.
- (2) Revenues from commercialization of oil to third parties are classified in accordance with the points of sale, which could be either the Exploration and Production or Refining, Transportation and Marketing segments.
- (3) Excluding non-controlling interests.
- (4) Consolidated capital expenditures for each of our business segments are based on our 2015-2019 Plan cost assumptions and financial methodology.

## Liquidity and Capital Resources

### Overview

Our principal uses of funds in 2015 were for capital expenditures (US\$21,502 million) and debt service obligations (US\$21,114 million). We met these requirements with cash provided by operating activities (amounting to US\$25,913 million), long-term financing (amounting to US\$17,420 million) and cash provided by the disposal of assets (amounting to US\$727 million). As of December 31, 2015, although our cash flow from operations was more than sufficient to meet our capital expenditures, our positive free cash flow (cash flow from operations after capital expenditures) was less than the resources needed to fund our debt principal and interest expenditures.

Following the recent sharp devaluation of the *real* against the U.S. dollar (42% from 2014 to 2015), the amount of *reals* (which is the currency of most of our revenues) necessary to service our foreign currency debt in the near term has increased significantly. As of December 31, 2015, our foreign currency debt totaled US\$105,610 million, representing approximately 83.7% of our total financial debt). The devaluation of the *real* has meant that our cash generation from operations translated into U.S. Dollars has declined, despite price increases for our oil products during the year. As a result, our cash generation from operating activities relative to our capacity to service our debt has declined, and could decline further if the *real* continues to devalue. See Item 3. “Key Information—Risk Factors—Risks Relating to Our Operations—We are vulnerable to increased debt service resulting from depreciation of the *real* in relation to the U.S. dollar and increases in prevailing market interest rates,” “Contractual Obligations” and Note 33.6 to our audited consolidated financial statements for further information about our liquidity risks and our contractual obligations and commitments (including debt obligations) as of December 31, 2015.

In addition, the loss by us and by the Brazilian federal government of our investment grade ratings have affected the confidence of investors in the Brazilian economy and in our business generally, making it more costly both to incur new debt and to refinance our short-term debt obligations.

In 2016, our major cash needs are to meet our budgeted capital expenditures for the year (amounting to US\$20 billion) and to make principal and interest payments of US\$19.6 billion on our debt.

### Financing Strategy

Our financing strategy is to fund our necessary capital expenditures and to preserve our cash balance and liquidity while meeting our principal and interest payment obligations.

We will pursue our financing strategy in 2016 and going forward by the following means: (i) using the potential proceeds from the sale of certain of our assets under our divestment program for the 2015-2016 period, (ii) reducing planned capital expenditures to be in line with our operating cash flows, (iii) reducing operating costs by improving efficiency and renegotiating contracts with suppliers, (iv) incurring new debt from traditional funding sources and new financing structures, and extending debt maturities with certain of our bank creditors, and (v) drawing down our cash balance, cash equivalents and marketable securities (which at December 31, 2015 amounted to US\$25.8 billion), as needed.

In 2016, approximately US\$1.1 billion has been disbursed to us through financing agreements executed with international commercial banks. See Note 35 to our audited consolidated financial statements. Additionally, we have recently executed a term sheet with the China Development Bank - CDB to obtain financing amounting to US\$10 billion. The terms of this US\$10 billion financing arrangement are currently being negotiated between us and the CDB.

### *Government Regulation*

We are required to submit our annual capital expenditures budget (*Orçamento Anual de Investimentos*, or OAI) to the MPBM and the MME. Following review by these governmental authorities, the Brazilian Congress must approve the budget. Although the total level of our annual capital expenditures is regulated, the specific application of funds is left to our discretion.

The MPBM controls the total amount of medium and long-term debt that we and our Brazilian subsidiaries can incur through the annual budget approval process. Before raising medium and long-term debt, we and our Brazilian subsidiaries must also obtain the approval of the National Treasury Secretariat. All of our foreign currency denominated debt, as well as the foreign currency denominated debt of our Brazilian subsidiaries, requires registration with the Central Bank. We also have to obtain an authorization from the Central Bank, in accordance with applicable law, in order to make any eventual remittances of funds abroad required by guarantee instruments we have entered into in connection with the incurrence of foreign currency denominated debt.

However, the incurrence of debt by our non-Brazilian subsidiaries, including PGF, is not subject to registration with the Central Bank or approval by the National Treasury Secretariat.

All medium and long-term debt incurred by Petrobras or its subsidiaries requires the approval of our board of executive officers, within the parameters established by our board of directors, except for the issuance of debentures, which require the approval of our board of directors.

### *Sources of Funds*

#### *Our Cash Flow*

In 2015, the resources needed to fund our capital expenditures (US\$21,502 million) and service our debt were met by cash flow from operations (US\$25,913 million), proceeds from long-term financing (US\$17,420 million) and cash provided by the disposal of assets (US\$727 million). As of December 31, 2015, our balance of cash and cash equivalents amounted to US\$25,058 million, compared to US\$16,655 million as of December 31, 2014 and our balance of government bonds and time deposits with maturities of more than three months decreased to US\$779 million as of December 31, 2015 from US\$9,302 million as of December 31, 2014.

We maintained our liquidity cushion consisting of our balance of cash and cash equivalents, as well as government bonds and time deposits with maturities of more than three months, amounting to US\$25,837 million as of December 31, 2015 as compared to US\$25,957 million

in December 31, 2014.

Net cash provided by operating activities decreased by 2.7% in 2015 compared to 2014. Excluding foreign currency translation effects, cash provided by operating activities increased by 38.8% when expressed in *reais*, as a result of higher diesel and gasoline prices, increased crude oil export volumes, lower production taxes and lower crude oil and oil product imports costs, along with a higher share of domestic crude oil on feedstock processing.

Proceeds from long-term financing totaled US\$17,420 million, in 2015. The principal sources of long-term financing were long-term financing obtained with the Chinese Development Bank (US\$5 billion), the issuance of global notes totaling US\$2.5 billion in the international capital markets and bilateral credit agreements with Brazilian banks.

Proceeds in 2015 from disposals of assets totaled US\$727 million, resulting mainly from the sale of (i) 49% of Gaspetro, a holding company that consolidates our equity interests in the State natural gas distributors in Brazil, to Mitsui, for US\$495 million and (ii) all of our exploration and production assets in the Austral Basin, in Argentina to Compañía General de Combustibles S.A., for US\$101 million. See Note 10 to our audited consolidated financial statements for further information regarding disposals of assets under our divestment program. We expect proceeds from the disposals of assets to increase in 2016, as our 2015-2016 divestment program estimates proceeds of approximately US\$15.1 billion, if all of such assets are successfully sold.

The uses of cash were primarily for capital expenditures and investments in operating units, which totaled US\$21,502 million in 2015, a decrease of 41% compared to 2014 (US\$34,750 million), mainly due to a decrease in capital expenditures in our Refining, Transportation and Marketing and Exploration and Production business segments.

Due to a loss in 2014, we did not pay dividends in 2015, as compared to US\$3,918 million paid in 2014. Our board of directors proposed no distribution of dividends in 2016 for profits accrued in the year ended December 31, 2015 because we also reported a loss for the fiscal year.

### *Short-Term Debt*

Our outstanding short-term debt serves many purposes, including supporting our working capital and our imports of crude oil and oil products. As of December 31, 2015, our total short-term debt amounted to US\$1,523 million and the current portion of our long-term debt amounted to US\$11,500 million, compared to US\$3,484 million and US\$6,845 million as of December 31, 2014, respectively.

### *Long-Term Debt*

Our outstanding long-term debt consists primarily of securities issued in the international capital markets, funding from development banks (such as the CDB and the BNDES), loans from Brazilian and international commercial banks and amounts outstanding under facilities guaranteed by export credit agencies and multilateral agencies. The non-current portion of our total long-term debt amounted to US\$111,482 million as of December 31, 2015, compared to US\$120,218 million as of December 31, 2014. This decrease was primarily due to foreign currency translation effects (depreciation of the *real* against the U.S. dollar). Excluding these effects, the non-current portion of our total long-term debt increased by 36% as a result of debt financing provided in 2015 by the CDB and domestic banking markets, as well as from the issuance of U.S. dollar denominated bonds. These financial resources will be used primarily to fund capital expenditures as set forth in our 2015-2019 Plan. See Note 17 to our audited consolidated financial statements for a breakdown of our debt, a roll-forward schedule of our non-current debt by source and other information.

Table of Contents

The following international debt issues are included in these figures at December 31, 2015:

<b>Notes(*)</b>	<b>Carrying amount as of December 31, 2015 (US\$ million)</b>
PGF's 3.250% Global Notes due 2017	1,598
PGF's 3.500% Global Notes due 2017(**)	1,747
PESA's 5.875% Notes due 2017	300
PGF's Floating Rate Global Notes due 2017(1)	1,399
PGF's 2.750% Global Notes due 2018(2)	1,628
PGF's 4.875% Global Notes due 2018(**)(3)	1,355
PGF's 5.875% Global Notes due 2018(**)	1,745
PGF's 8.375% Global Notes due 2018(**)	574
PGF's 7.875% Global Notes due 2019(**)	2,770
PGF's 3.000% Global Notes due 2019	1,990
PGF's 3.250% Global Notes due 2019(4)	1,409
PGF's Floating Rate Global Notes due 2019(5)	1,498
PGF's 4.875% Global Notes due 2020	1,495
PGF's 5.750% Global Notes due 2020(**)	2,485
PGF's Floating Rate Global Notes due 2020(6)	499
PGF's 3.750% Global Notes due 2021(7)	810
PGF's 5.375% Global Notes due 2021(**)	5,308
PGF's 5.875% Global Notes due 2022(**) (8)	648
PGF's 4.250% Global Notes due 2023(9)	749
PGF's 4.375% Global Notes due 2023	3,461
PGF's 6.250% Global Notes due 2024	2,489
PGF's 4.750% Global Notes due 2025(10)	861
PGF's 6.250% Global Notes due 2026(**)(11)	1,017
PGF's 5.375% Global Notes due 2029(12)	650
PGF's 6.625% Global Notes due 2034(13)	876
PGF's 6.875% Global Notes due 2040(**)	1,472
PGF's 6.750% Global Notes due 2041(**)	2,368
PGF's 5.625% Global Notes due 2043	1,711
PGF's 7.250% Global Notes due 2044	988
PGF's 6.850% Global Notes due 2115	2,019

---

(*)	Petrobras fully and unconditionally guarantees the notes issued by PGF.
(**)	Originally issued by PifCo.
(1)	Floating rate equal to a three-month U.S. dollar LIBOR plus 2.360%.
(2)	Issued by PGF on January 14, 2014 in the amount of €1.5 billion.
(3)	Issued by PifCo on December 9, 2011 in the amount of €1.25 billion.
(4)	Issued by PGF on October 01, 2012 in the amount of €1.3 billion.
(5)	Floating rate equal to a three-month U.S. dollar LIBOR plus 2.140%
(6)	Floating rate equal to a three-month U.S. dollar LIBOR plus 2.880%.
(7)	Issued by PGF on January 14, 2014 in the amount of €750 million.
(8)	Issued by PifCo on December 9, 2011 in the amount of €600 million.



- (9) Issued by PGF on October 01, 2012 in the amount of €700 million.
- (10) Issued by PGF on January 14, 2014 in the amount of €800 million.
- (11) Issued by PifCo on December 12, 2011 in the amount of £700 million.
- (12) Issued by PGF on October 01, 2012 in the amount of £450 million.
- (13) Issued by PGF on January 14, 2014 in the amount of £600 million.

Table of Contents*Off Balance Sheet Arrangements*

As of December 31, 2015, we had no off-balance sheet arrangements that have, or are reasonably likely to have, a material effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

*Uses of Funds**Capital Expenditures and Investments*

We invested a total of US\$23,058 million in 2015, a 38% decrease, when compared to our investments of US\$37,004 million in 2014. Our investments in 2015 were primarily directed toward increasing oil and gas production. Of our total capital expenditures in 2015, US\$19,131 million was invested in exploration and development projects in Brazil and abroad.

The following table sets forth our consolidated capital expenditures for each of our business segments for 2015, 2014 and 2013:

	<b>For the Year Ended December</b>		
	<b>31(2)</b>		
	<b>2015(1)</b>	<b>2014(1)</b>	<b>2013(1)</b>
	<b>(US\$ million)</b>		
Exploration and Production	19,131	25,500	29,692
Refining, Transportation and Marketing	2,534	7,882	14,399
Gas and Power	793	2,571	2,742
Biofuel	43	112	143
Distribution	255	487	566
Corporate	302	452	555
<b>Total</b>	<b>23,058</b>	<b>37,004</b>	<b>48,097</b>

(1)

In the fourth quarter of 2015, we changed our reportable business segments to reflect the reallocation of our international activities into the business segment to which the underlying activities correspond, thus reducing our reportable business segments from six to five.

(2)

Consolidated capital expenditures for each of our business segments are based on our 2015-2019 Plan cost assumptions and financial methodology.

On January 12, 2016, we announced projected capital expenditures of US\$20 billion for 2016. We plan to meet our budgeted capital expenditures primarily through cash flow from our operations, structured facilities and project finance loans, commercial bank loans, divestments, issuances of debt securities in the international capital markets and other sources of capital. Our actual capital expenditures may vary substantially from the projected numbers set forth above as a result of market conditions and the cost and availability of the necessary funds.

### *Dividends*

We did not pay dividends for the year ended December 31, 2014. Our board of directors proposed no distribution of dividends in 2016 for profits accrued in the year ended December 31, 2015 because we reported a loss for the fiscal year. See Note 23.5 to our audited consolidated financial statements.

For more information on our dividend policy, including a description of the minimum dividend to which our preferred shareholders are entitled under our bylaws, see “Mandatory Distribution” and “Payment of Dividends and Interest on Capital” in Item 10. “Additional Information—Memorandum and Articles of Incorporation.”

**Contractual Obligations**

The following table summarizes our outstanding contractual obligations and commitments at December 31, 2015:

	<b>Total</b>	<b>Payments Due by Period</b>			
		<b>&lt; 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>&gt; 5 years</b>
<b>(US\$ million)</b>					
<b>Contractual obligations</b>					
<b>Balance sheet items(1):</b>					
Debt obligations(2)	126,165	14,683	27,488	38,133	45,861
Finance lease obligations	51	12	11	1	21
Provision for decommissioning costs	9,150	613	1,956	153	6,428
Total balance sheet items	135,366	15,308	29,455	38,293	52,310
<b>Other long-term contractual commitments</b>					
Natural gas ship-or-pay	3,098	632	1,276	905	285
Service contracts	68,047	22,523	20,321	7,079	18,124
Natural gas supply agreements	7,950	1,038	2,593	3,112	1,705
Operating leases	99,194	11,686	17,701	13,388	56,419
Purchase commitments	21,952	10,571	7,102	2,569	1,710
Total other long-term commitments	200,241	46,450	48,993	27,053	78,243
<b>Total</b>	<b>335,607</b>	<b>61,758</b>	<b>78,448</b>	<b>65,346</b>	<b>130,553</b>

(1) Excludes the amount of US\$25,363 million related to our pension and medical benefits obligations, which are partially funded by US\$12,513 million in plan assets. Information on employees' post-retirement benefit plans, including a schedule of expected maturity of pension and medical benefits obligations, is set forth in Note 22 to our audited consolidated financial.

(2) Includes accrued interest, short-term and long-term debt (current and non-current portions). Information about our future interest and principal payments (undiscounted) for the coming years is set forth in Note 33.6 to our audited consolidated financial statements.

**Critical Accounting Policies and Estimates**

Information about those areas that require the most judgment or involve a higher degree of complexity in the application of the accounting policies that currently affect our financial condition and results of operations is provided in Note 5 to our audited consolidated financial statements (comprising oil and gas reserves, depreciation and impairment; identifying cash-generating units for impairment testing; pension and other post-retirement obligations; contingent liabilities and provisions; dismantling of areas; deferred income tax; cash flow

hedge accounting; the accounting approach with respect to the facts uncovered by the Lava Jato Operation; and allowance for impairment of trade receivables). Additional information about our accounting policies and new amendments and standards are provided in Notes 4 and 6 to our audited consolidated financial statements. Further information about impairment of assets is provided in Note 14 to our audited consolidated financial statements. Additionally, we have expanded herein the discussion of some of the items addressed in our financial statements for certain topics, such as the estimation methodology for determining the write-off for overpayments incorrectly capitalized; dismantling of areas and environmental remediation; impairment testing of refining assets; impairment of crude oil and natural gas producing properties, pension and other post-retirement benefits; cash flow hedge accounting involving our future exports; as well as the allowance for impairment of trade receivables.

The accounting estimates we make in these contexts require us to make assumptions about matters that are highly uncertain. The aforementioned notes address only those estimates that we consider most important based on the degree of uncertainty and the likelihood of a material impact if we used a different estimate. There are many other areas in which we use estimates about uncertain matters, but the reasonably likely effect of changed or different estimates is not material to our financial presentation.

*Estimation Methodology for Determining Write-Off for Overpayments Incorrectly Capitalized*

In the third quarter of 2014, we wrote off US\$2,527 million of capitalized costs representing amounts that we overpaid for the acquisition of property, plant and equipment in prior years.

Beginning in 2014, and over the course of 2015, the Brazilian Federal Prosecutor's Office focused part of its investigation on irregularities involving our contractors and suppliers and uncovered a broad payment scheme that involved a wide range of participants, including former Petrobras personnel. Based on the information available to us, the payment scheme involved a group of companies that, between 2004 and April 2012, colluded to obtain contracts with us, overcharging us under those contracts and using the overpayment received under the contracts to fund improper payments to political parties, elected officials or other public officials, individual contractor personnel, former Petrobras personnel and other individuals involved in the payment scheme.

In addition to the payment scheme, the investigations identified several specific instances of other contractors and suppliers that allegedly overcharged Petrobras and used the overpayment received from their contracts with us to fund improper payments, unrelated to the payment scheme, to certain former Petrobras personnel.

We did not make or receive any improper payments. They were made by outside contractors and suppliers, so the exact amounts that we overpaid to fund these improper payments cannot be identified. The information to determine the amount by which we were overcharged by the cartel members is not contained within our accounting records. These records reflect the terms of the contract entered into by us, which entailed payments that were inflated because of the conspiracy among the cartel members and the former Petrobras personnel to overcharge us. The money-laundering activities alleged to have occurred were designed to hide the origins and amounts of the funds involved, so a specific accounting should not be expected.

We concluded that the portion of the costs incurred to build our property, plant and equipment that resulted from contractors and suppliers in the cartel overcharging us to make improper payments should not have been capitalized. In order to account for the impact of overpayments, we developed an estimation methodology to serve as a proxy for the adjustment that should be made to property plant and equipment using the five steps described below:

- (1) Identify contractual counterparties: we listed all the companies identified in public testimony, and using that information we identified all of the contractors and suppliers that were either so identified or were consortia including entities so identified.
- (2) Identify the period: we concluded from the testimony that the payment scheme was operating from 2004 through April 2012.

(3) Identify contracts: we identified all contracts entered into with the counterparties identified in step 1 during the period identified in step 2, which included supplemental contracts when the original contract was entered into between 2004 and April 2012. We have identified all of the property, plant and equipment related to those contracts.

(4) Identify payments: we calculated the total contract values under the contracts identified in step 3.

(5) Apply a fixed percentage to the amount determined in Step 4: we estimated the aggregate overpayment by applying a percentage indicated in the depositions (3%) to the total amounts for identified contracts.

110

---

Table of Contents

For overpayments attributable to other contractors and suppliers, unrelated to the payment scheme, we included in the write-off for incorrectly capitalized overpayments the specific amounts of improper payments or percentages of contract values, as described in the testimony, which were used by those suppliers and contractors to fund improper payments.

We believe that this methodology produces the best estimate for the aggregate overstatement of our property, plant and equipment resulting from the payment scheme, in the sense that it represents the upper bound of the range of reasonable estimates. The estimate assumes that all contracts with the identified counterparties were affected and that 3% represents the amount by which we overpaid on those contracts. Both assumptions are supported by the testimony, even though some testimony indicated lower percentages with respect to certain contracts, a shorter period (2006 to 2011), or fewer contractors involved.

We acknowledge the degree of uncertainty involved in the estimation methodology. However, as discussed above, we believe we have used the most appropriate methodology and assumptions to determine the impact of the payment scheme based on the information available to us and there is no evidence that would indicate the possibility of a material change in the amounts that were written off.

The information available to us is generally consistent with respect to the existence of the payment scheme, the companies involved in the payment scheme, the former Petrobras personnel involved in the payment scheme, the period during which the payment scheme was in effect, and the maximum amounts involved in the payment scheme relative to the contract values of affected contracts.

We closely monitored the progress of the Lava Jato investigation throughout 2015, and no new facts were discovered that could materially impact our previously recorded adjustments or change the methodology adopted with respect to the write-off. We will continue to monitor the investigations for additional information and will review its potential impact on the adjustment made.

See Note 3 to our audited consolidated financial statements for a detailed description of the investigations, the payment scheme and our response to it, sources of information available to us, the estimation methodology and the impact of the improper payments on our financial statements.

### *Dismantling of Areas and Environmental Remediation*

Under various contracts, concessions, permits and regulations, we have material legal obligations to remove equipment and restore the land or seabed at the end of operations at production sites. Our most significant asset removal obligations involve removal and disposal of offshore oil and gas wells and production facilities worldwide.

We accrue the estimated discounted decommissioning costs (for dismantling and removing these facilities) at the time of installation of the assets. We also estimate costs for future



environmental clean-up and remediation activities based on current information on costs and expected plans for remediation. Estimating asset retirement, removal and environmental remediation costs requires performing complex calculations that necessarily involve significant judgment because our obligations are many years in the future, the contracts and regulation have vague descriptions of what removal and remediation practices and criteria will have to be met when the removal and remediation events actually occur and asset removal technologies and costs are constantly changing, along with regulatory, environmental, safety and public relations considerations. Consequently, the timing and amounts of future cash flows are subject to significant uncertainty.

Table of Contents

We reviewed and revised our estimated costs associated with well abandonment and the demobilization of oil and gas production areas. As a result, for 2015, there was an US\$883 million increase in the amounts related to the revision of the provision for decommissioning costs, mainly attributable to (i) a US\$1,744 million increase attributable to an acceleration of abandonment costs resulting from a shorter economic life of oil fields due to lower crude oil prices (Brent); (ii) a US\$1,848 million increase attributable to a revision based on additional information obtained from 2015 well abandonments. Those effects were partially offset by a US\$2,915 million decrease attributable to an increase of our risk-adjusted discount rate (to 6.73% p.a. at December 31, 2015 from 3.76% p.a. at December 31, 2014).

Petrobras regularly conducts studies to incorporate the most recent technologies and procedures to optimize the abandonment of areas, considering industry best practices and previous experiences with respect to costs incurred through final well abandonment.

See Note 20 to our audited consolidated financial statements for more information about the annual changes in the provision for decommissioning costs.

*Deferred Income Tax*

Deferred income tax liabilities are recognized for all taxable temporary differences and deferred income tax assets are recognized for all taxable temporary differences and carryforward of unused tax losses or credits to the extent that it is probable that taxable profit will be available against which a deductible temporary difference can be utilized or it is probable that the entity will have sufficient taxable profit in future periods.

We evaluate whether we will have sufficient profit in the future in accordance with projections and estimates mainly related to Brent crude oil prices, foreign exchange rates and our projected net finance expenses (income) set forth within our relevant business and management plan. Despite operating losses in 2014 and 2015, we expect to generate future taxable profits mainly due to: (i) higher oil and gas production; (ii) increase in the average Brent crude oil price; (iii) new projects focusing on oil production in the pre-salt area and (iv) measures for optimization and productivity gains to reduce manageable operating costs (greater efficiency in the management of contracted services, reorganization of our structures and businesses, as well as personnel costs and costs of inputs acquisition reductions). Significant differences between our projections assumptions and the actual results of these variables can result in changes in our expected realization of deferred tax assets recognition. See Note 21.6 (b) to our audited consolidated financial statements for more information about timing of reversal of deferred income taxes.

For more detailed information about our taxation policies and amounts related to taxes, see Notes 4.15, 5.6 and 21 to our audited consolidated financial statements.

*Impairment Testing of Refining Assets*

Until the third quarter of 2014, we grouped all refineries and associated assets, terminals and pipelines, as well as logistics assets operated by Transpetro, all located in Brazil, into a single cash generating unit (“CGU”) referred to as the “Downstream Assets CGU.”

However, in the quarter ended December 31, 2014, changes in circumstances prompted a review of our planned projects and ultimately led our management to revise certain projects that were under construction.

Table of Contents

Those circumstances included: (i) a decrease in expected future operating revenues following the decline of international crude oil prices; (ii) the devaluation of the Brazilian *real*, and the increased cash outflow to service our debt in the near-term, most of which is denominated in foreign currencies; (iii) Petrobras's inability to access the capital markets at that time; (iv) insolvency of contractors and suppliers and a consequent shortage of qualified contractors and suppliers (as a result of the difficulties created for suppliers by the Lava Jato investigation or otherwise).

As a result, we decided to postpone for an extended period of time the completion of the following refining projects: (i) Petrochemical Complex of Rio de Janeiro (Complexo Petroquímico do Rio de Janeiro - Comperj); and (ii) the second refining unit in the Abreu e Lima refinery (RNEST). For that reason, since December 2014, those assets under construction were removed from the "Downstream CGU" and were tested for impairment individually.

Except for the removal of these two projects, the "Downstream CGU" remains unchanged. This CGU was identified based on the concept of integrated optimization and performance management, which focuses on the global performance of the CGU, allowing a shift of margins from one refinery to another. All decisions concerning this CGU (operation, investments, and market strategy) seek to maximize the value of the whole system rather than improve the results of each constituent part. Pipelines and terminals are also an interdependent portion of the refining assets, required to supply the market.

We determined the recoverable amounts of the following assets based on their value-in-use: (i) the "Downstream CGU"; (ii) Comperj; and (iii) the second refining unit of RNEST. The assessment of the value-in-use involves the use of estimates on uncertain assumptions, such as future production curves, future commodity prices, sales revenue growth, operating margins, discount rates, foreign exchange rates, inflation rates and investments required for carrying out projects.

The key assumptions on which we based our cash flow projections to determine the value in use were approved by our management, and are described below:

- estimated average exchange rate of R\$4.06 to US\$1.00 in 2016 (converging to R\$3.55 to US\$1.00 in the long-term);
- average Brent crude oil price of US\$45 for 2016, converging to US\$72 in the long-term;
- domestic sales volume growth based on projected Brazilian and global GDP growth;
- EBITDA margin reflecting the convergence of diesel and gasoline prices in Brazil with international benchmarks; and
- post-tax discount rates derived from our weighted average cost of capital (reviewed annually). The post-tax discount rate for Comperj and the second refining unit of RNEST also

include specific risks related to these assets.

These assumptions are subject to changes that could affect the carrying amounts of assets, and eventually cause impairment charges and reversals that would affect profit or loss.

Future price assumptions do not consider short-term increases or decreases in price as indicative of long-term trend changes and therefore tend to be stable. Nonetheless, such prices are subject to change.

With respect to Comperj, we recognized impairment losses of US\$1.3 billion and US\$8.2 billion in 2015 and 2014, respectively. In 2014, we also recognized impairment losses of US\$3.4 billion related to the second refining unit in RNEST. No impairment losses have been recognized for the "Downstream CGU."

Table of Contents

For more detailed information about our impairment policies and impairment test results, see Notes 4.10, 5.2 and 14 to our audited consolidated financial statements.

### *Impairment of Crude Oil and Natural Gas Producing Properties*

Based on the interdependencies among certain oil fields, fields are grouped at the smallest identifiable group that generates largely independent cash inflows from others. Changes in the aggregation into CGUs could result in additional impairment charges or reversals. Such changes may occur when investment, strategic or operational factors result in changes in the interdependencies among those assets and, consequently, alter the aggregation of assets into CGUs.

In 2015, the aggregation of certain crude oil and natural gas producing properties located in the mid-southern Campos Basin into a cash-generating unit (the Centro-Sul group of crude oil and natural gas producing properties) was changed and as a result, impairment tests were run separately for those individual oil fields. This change occurred as a result of: (i) the beginning of production shutdown in the Bicudo field; (ii) the sale of Bijupirá and Salema fields; and (iii) a reassessment of the natural gas production process in the mid-southern region of the Campos Basin, reflecting an increase in the domestic demand for natural gas in the thermoelectric industry, which resulted in a decrease of natural gas reinjection. Accordingly, the following fields have been disaggregated from the CGU: Espadarte, Linguado, Bicudo, Badejo, Pampo, Trilha, Tartaruga Verde and Tartaruga Mestiça.

In 2015, we recognized impairment losses related to the Espadarte, Linguado, Bicudo, Badejo, Pampo and Trilha fields amounting to US\$1.7 billion, reflecting the impact of the decline in international crude oil prices and the use of a higher discount rate attributable to an increase in Brazil's risk premium.

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

We provide post-retirement benefits to our employees mainly through the Petros and Petros 2 pension plans and AMS health care plan (*Assistência Multidisciplinar de Saúde*), as well as other pension and health care plans internationally.

Net actuarial liabilities were US\$12,850 million as of December 31, 2015, a 26% decrease from US\$17,287 million as of December 31, 2014, due to foreign currency translation effects (depreciation of the *real* against the U.S. dollar). Excluding these effects, net actuarial liabilities increased by 9% when expressed in *reais*, mainly due to increased interest and service costs incurred during the year, partially offset by contributions paid in 2015.

Our discount rates used in calculating the actuarial liabilities for our pension and health care plans are determined based on the weighted average of Brazilian federal government long-term securities (NTN-B) for our post-retirement benefits obligations duration (i.e. considering the maturity profile of the actuarial obligations).

See Note 22 to our audited consolidated financial statements for more detailed information about our actuarial obligations, including our actuarial assumptions, and for a sensitivity analysis of the impact of a 100 basis point change in our discount rates, as well as the effect of changes in other actuarial assumptions.

### *Cash Flow Hedge Accounting Involving our Future Exports*

Since mid-May 2013 we have designated cash flow hedging relationships in which (a) the hedged items are portions of our highly probable future monthly export revenues in U.S. dollars, (b) the hedging instruments are portions of our long-term debt obligations denominated in U.S. dollars, and (c) the risk hedged is the effect of changes in exchange rates between the U.S. dollar and our functional currency, the Brazilian *real*. Both long-term debt obligations (hedging instruments) and future exports (hedged items) are exposed to the *real*/U.S. dollar foreign currency risks at their respective spot exchange rate. Cash flow hedge accounting allows gains and losses arising from the effect of changes in the foreign currency exchange rate on the hedging instruments to be recognized in other comprehensive income in shareholders' equity and then reclassified from equity to profit or loss in the periods during which the hedged transactions occur, rather than being immediately recognized as profits or losses.

See Note 33.2 to our consolidated financial statement for further information regarding the cumulative foreign exchange losses recognized in other comprehensive income as of December 31, 2015 and their expected reclassification to finance income (expense) for the following fiscal years. The gains or losses relating to the ineffective portion are immediately recognized in the statement of income.

The highly probable future exports are defined by determining a percentage of total forecast exports based on a time series comparing realized and forecast exports (based on our five-year business and management plans and our long-term strategic plan projections). Forecast future exports are reviewed whenever we review our business and management plans and strategic plan assumptions. The ratio of highly probable future exports to total forecast exports is reviewed at least once a year. Projections of future exports are determined based on our operational and capital expenditure optimization model and are affected by different assumptions, including crude oil and oil products prices, our projected crude oil and natural gas production and domestic demand.

For more detailed information about our cash flow hedge accounting policy, see Notes 4.3.6, 5.7 and 33.2 to our audited consolidated financial statements.

### *Allowance for Impairment of Trade Receivables from the Isolated Electricity Sector in the Northern Region of Brazil*

We continuously assess whether there is objective evidence that trade receivables are impaired and recognize allowances for impairment of trade receivables to cover losses.

In 2015, we recognized an allowance for impairment of trade receivables of US\$2,060 million, of which 59% is to cover uncollateralized receivables from the isolated electricity system in the northern region of Brazil, as compared to an allowance for impairment of trade receivables of US\$1,948 million to cover uncollateralized receivables from the isolated electricity sector recognized in 2014.



See Notes 4.3.3, 5.9, 8.3 and 8.4 to our audited consolidated financial statements for more detailed information about our accounting policies with respect to trade receivables and about the receivables from the isolated electricity system in the northern region of Brazil.

## Research and Development

We are deeply committed to research and development as a means to extend our reach to new production frontiers and achieve continuous improvement in operations. We have a history of successfully developing and implementing innovative technologies, including the means to drill, complete and produce wells in increasingly deep water. In 2015 our technologies received for the 3<sup>rd</sup> time the Offshore Technology Conference Distinguished Achievement Award, the highest recognition awarded to an oil company as an offshore operator.

We spend a significant percentage of our revenues in research and development, what makes us one of the largest research and development investors among the world's major oil companies. Our Brazilian oil and gas concession agreements require us to invest at least 1% of our gross revenues originating from high productivity oil fields on research and development, of which up to half is invested in our research facilities in Brazil and the remainder is invested in Brazilian universities and institutions accredited by the ANP for this purpose.

In 2015, we spent US\$630 million on research and development, equivalent to 0.65% of our sales revenues, while in 2014 we spent US\$1,099 million, equivalent to 0.77% of our sales revenues. This reduction is mainly attributable to foreign currency translation effects (depreciation of the *real* against the U.S. dollar), which reduced our investments in research and development when expressed in U.S. dollars. In 2013, we spent US\$1,132 million, equivalent to 0.80% of our sales revenues.

Our research and development activities are based on strategic choices that we make regarding technological development, which we call our "Technological Focus," namely:

### *For Exploration & Production*

- Exploration of New Frontiers;
- Offshore wells building and maintenance optimization;
- Subsea Production Systems;
- Pre-Salt Production;
- Offshore Logistics; and
- Mature fields production optimization.

### *For Downstream, Transport, Distribution, Biofuels and Petrochemical*

- Gasoline and medium oil products production optimization;
- Pre-Salt Oils Refining;
- Optimization and integration of operating logistics;
- Innovative Products; and
- More usage of both fossil and renewable streams as raw materials for petrochemicals.

*For Gas and Energy*

- Valuation of new potentials of natural gas in both conventional and non-conventional reservoirs spread throughout onshore sedimentary basins located in Brazil's countryside regions;

Table of Contents

- Integration and flexibility in the supply and demand of both energy and natural gas;
- Natural Gas Logistics;
- Value-adding to Natural Gas via methane chemistry;
- Natural Gas Processing; and
- Energy Integration and Reliability – Cost Reduction.

*For all Business Segments and Sustainability*

- Development of building and assembly technology for naval and industrial design;
- Optimization of productive processes and energy efficiency;
- Integrity, safety and reliability of new materials and equipment available;
- Technology for mitigation of atmospheric emissions (CO<sub>2</sub> and other emissions);
- Technology for disposal, treatment, reuse and reduction of water consumption;
- Technology for recovery of environmentally affected areas; and
- Environmental studies and evaluation of environmental impacts.

*Forward-Thinking – 2030 Perspective*

- Increased reliability of risk estimates through the integrated simulation of geological processes;
- Maritime Production Systems;
- Energy production, storage and distribution systems that are used in electric and hybrid vehicles, improving mobility;
- Development of new materials suitable for use in extreme operating conditions;
- Renewable Energy;
- Technologies used for improving gas hydrates prospection; and

- Bioproducts.

In the three-year period ended December 31, 2015, our research and development operations were awarded 118 patents in Brazil and 113 overseas. Our portfolio of patents covers all of our areas of activities.

We have operated a dedicated research and development facility in Rio de Janeiro, Brazil since 1963. As a result of its expansion in 2010, this is one of the largest facilities of its kind in the energy sector and the largest in the southern hemisphere, with laboratories especially dedicated to pre-salt technologies. As of December 31, 2015, this facility had 1,808 employees, 90.6% of which are exclusively dedicated to research, development and basic engineering.

Table of Contents

We also have several semi-industrial scale prototype plants throughout Brazil that are in proximity to our industrial facilities and that are aimed at scaling up new industrial technologies at reduced costs. In 2015, we conducted research and development through joint research projects with more than 100 universities and research centers in Brazil and abroad and participated in technology exchange and assistance partnerships with several oilfield service companies, small technology companies and other operators.

## Trends

Brazil has been hit by a severe recession in 2015. GDP decreased by 3.8%, its worst fall since 1990. This decrease resulted in a significant deterioration in business and consumer expectations and in a sharp drop in domestic demand, in investments and in private consumption. Despite the recent decline in the demand for oil products, mainly attributable to this recent downturn of the economy in Brazil, we still expect that the demand for oil products in Brazil will return to grow in the medium- and long-terms, driven primarily by a future economic recovery from the current recession in Brazil and the increase in purchasing power of the Brazilian population.

Rising vehicle ownership rates, population growth and the need to transport goods from production sites to end-consumers connect the anticipated medium- and long-terms economic growth with additional demand for oil products. However, future economic downturns, internationally as well as in Brazil, could negatively affect these assumptions.

In recent years, we met any incremental growth in demand by increasing imports of oil and oil products and improving the throughput of our refineries, since our oil production and our refining capacity were not sufficient to meet the increased demand. Higher import of oil and oil products increased our cost of sales and decreased our refining margins in recent years, because we had not fully adjusted our domestic prices to reflect the higher international cost of oil.

However, this dynamic has changed in 2015. Refining margins were partially restored as a result of falling international crude oil prices.

Also, as a result of the increase of (i) the biodiesel blend in fuels generally and (ii) ethanol consumption driven by an increasing share of flexfuel fleet in Brazil, we expect that biofuels consumption will increase in Brazil over the long-term, resulting in a reduction in the pace of growth in Brazilian demand for gasoline and diesel. However, in the medium term, ethanol supply is limited by reduced investment capacity and the high indebtedness levels of the Brazilian ethanol industry. In the long-term, international agreements in favor of reducing greenhouse gas emissions may play a role in increasing the consumption of biodiesel and ethanol. In December 2015, the UN Climate Conference was held in Paris and it adopted the first global agreement to reduce greenhouse gas emissions and mitigate climate change impacts. This agreement will be effective starting in 2020.

The price we realize for the crude oil we export is determined by international oil prices, although we generally sell our crude oil at a discount compared to Brent crude oil and other light oil benchmark prices because it is heavier and thus more expensive to refine. After a strong decline through the second half of 2014, oil prices remained at low levels in 2015, ending the year with Brent crude oil trading at US\$35.75/barrel. The 2015 annual average price was US\$52.31 per barrel, a decrease of 47% compared to the previous year.

Worldwide, there has been a change in the dynamics of supply of crude oil from non-OPEC countries, from which production rose by 1.23 mmbbl/d in 2015 compared to 2014. Although some non-OPEC countries have increased their supply, there has been a drastic decline in growth of production during 2015, particularly in the United States, where crude oil production rose by less than 800 mbbbl/d in the last quarter of 2015, after reaching 1.6 mmbbl/d during the first half of 2015. Meanwhile, the OPEC countries - particularly Iraq and Saudi Arabia - substantially boosted production by the end of 2015 to 32.18 mmbbl/d, which is 1.18 mmbbl/d higher than the average volume they produced in 2014.

Table of Contents

We expect that the global oil market will remain oversupplied throughout 2016, and concerns about the increase of world oil supply may keep prices low.

This low crude oil price environment has posed challenges for technological development and innovation in the oil and gas industry. Upstream projects are either being developed at a slower pace or postponed. Oil and gas companies are prioritizing technologies and techniques that assure lower costs and higher efficiency in the short- and medium term, although maintaining and increasing oil and gas reserves is still a long-term objective.

Each year, we review and revise our long-term business and management plan in order to adapt to changing market conditions and to revise our capital expenditure levels in accordance with updated scenarios and projected cash flows.

We are currently working on our updated business and management plan and we expect to release it following approval by our board of directors. Due to the recent changes in the global and the Brazilian macroeconomic environment, the substantial decrease in Brent crude oil prices, the depreciation of the *real* against the U.S. dollar, as well as the impact of the ongoing Lava Jato investigations, our updated business and management plan may reflect a reduction of our capital expenditures and a revision of our financial performance indicators as compared with those in our 2015-2019 Plan.

## **Item 6. Directors, Senior Management and Employees**

### **Directors and Senior Management**

#### *Directors*

Our board of directors, which we refer to as the *conselho de administração*, is composed of a minimum of five and maximum ten members (plus their respective alternates) and is responsible for, among other things, establishing our general business policies. The members of the board of directors (and their respective alternates) are elected at the annual general meeting of shareholders, including the employee representative previously selected by means of a separate voting procedure. The alternate member position is exceptional and its elimination from our management structure will be voted upon at our annual general shareholders' meeting to be held on April 28, 2016. For further information regarding the attributions and duties of our board of directors, see Exhibit 1.1 for a copy of our bylaws.

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



depending on the amount of capital stock of the company. For a company like Petrobras, the applicable threshold is 5%. Thus, shareholders representing 5% of our voting capital may demand the adoption of a cumulative voting procedure.

Table of Contents

Our bylaws enable (i) minority preferred shareholders that together hold at least 10% of the total capital stock (excluding capital stock held by the controlling shareholders) to elect and remove one member (and his respective alternate) to our board of directors, in a separate voting procedure at the general meeting; (ii) minority common shareholders to elect and remove one member (and his respective alternate) to our board of directors, if a greater number of directors is not elected by such minority shareholders by means of the cumulative voting procedure; and (iii) our employees to directly elect one member (and his respective alternate) to our board of directors by means of a separate voting procedure, pursuant to Law No. 12,353 and MPBM's Act No. 26. Our bylaws provide that, regardless of the rights above granted to minority shareholders, the Brazilian federal government always has the right to elect the majority of our directors, independently of their number. In addition, under Law 10,683, one of the board members elected by the Brazilian federal government must be indicated by the Minister of Planning, Budget and Management. The maximum term for a director is one year, but re-election is permitted. In accordance with the Brazilian Corporate Law, the shareholders may remove any director from office at any time with or without cause at an extraordinary meeting of shareholders. Following an election of board members pursuant to the cumulative voting procedure, the removal of any board member by an extraordinary meeting of shareholders will result in the removal of all of the other members, after which new elections must be held.

We currently have eight permanent directors. The following table sets forth certain information with respect to these directors and their respective alternates:

<b>Name</b>	<b>Date of Birth</b>	<b>Position</b>	<b>Current Term Expires</b>	<b>Business Address of Permanent Directors</b>
Luiz Nelson Guedes de Carvalho(1)	November 18, 1945	Chair	April 2016	Av. Prof. Luciano Gualberto, 908 – FEA3 – Cid. Universitária - São Paulo –SP ZIP code: 05508-010
Jerônimo Antunes	November 18, 1955	Alternate	April 2016	
Aldemir Bendine(1)	December 10, 1963	Director	April 2016	Avenida Henrique Valadares, 28, Tower A
Ivan de Souza Monteiro	November 15, 1960	Alternate	April 2016	18 <sup>rd</sup> floor Rio de Janeiro – RJ ZIP code: 20.231-030
Luciano Galvão Coutinho(1)	September 29, 1946	Director	April 2016	Av. República do Chile, 100
		Alternate	April 2016	22 <sup>nd</sup> floor

Edgar Filing: PETROBRAS - PETROLEO BRASILEIRO SA - Form 20-F

Julio Cesar Maciel Ramundo	December 2, 1969			Rio de Janeiro – RJ
				ZIP code: 20.031-917
Roberto da Cunha Castello Branco(1)	July 20, 1944	Director	April 2016	Praia de Botafogo 190, 11 <sup>th</sup> floor
	May 4, 1959	Alternate	April 2016	
João Victor Issler				Rio de Janeiro – RJ
				ZIP code: 22250-900
Segen Farid Estefen(1)	January 20, 1951	Director	April 2016	COPPE - Universidade Federal do Rio de Janeiro Centro de Tecnologia - Bloco I - room 108 - Cidade Universitária
				Rio de Janeiro – RJ
				ZIP code: 21941-909
Guilherme Affonso Ferreira(2)	May 9, 1951	Director	April 2016	Rua Estados Unidos, 1342
	September 14, 1975	Alternate	April 2016	São Paulo – SP
Gustavo Rocha Gattass				
				ZIP code: 01427-001
Walter Mendes de Oliveira Filho(3)	December 7, 1955	Director	April 2016	Av. República do Chile, 65 – 24 <sup>th</sup> floor - Rio de Janeiro – RJ
		Alternate	April 2016	
Francisco Petros Oliveira Lima Papathanasiadis	September 14, 1964			ZIP code: 20031-170
Deyvid Souza Bacelar da Silva(4)	February 18, 1980	Director	April 2016	Rodovia BA 523, Km 4, Mataripe, São Francisco do Conde – BA
				ZIP code: 49170-000

- 
- (1) Appointed by the controlling shareholder.  
(2) Appointed by the minority preferred shareholders.  
(3) Appointed by the minority common shareholders.  
(4) Appointed by our employees.

Table of Contents

*Luiz Nelson Guedes de Carvalho*—Mr. Carvalho has been a member of our board of directors since April 2015 and our chairman since September 2015. Mr. Carvalho also chaired the audit committee of our board of directors from April 2015 to September 2015. He has been a member of the board of directors of BMF&BOVESPA (and the coordinator of its audit committee) since 2013 and also the chairman of the audit committee of Grupo Pão de Açúcar – GPA since 2014. He is currently a professor at Universidade do Estado de São Paulo – Faculdade de Economia, Administração e Contabilidade, a member of the Comitê de Pronunciamentos Contábeis CPC – Brasil, a member of the International Integrated Reporting Committee (*Comitê Internacional para Relatórios Integrados*) led by the Prince of Wales, an independent member of the banking auto-regulation board of the Brazilian Federation of Banks (*Federação Brasileira de Bancos*, or Febraban), a member of the Brazilian Accounting Academy (*Academia Brasileira De Ciências Contábeis*, or Abracicon), among others. Mr. Carvalho has previously served as a member of the board of directors of XBRL International Inc., a member of the Financial Crisis Advisory Group – FCAG, the first independent president of the Standards Advisory Council – SAC at IASB (from July 2005 to December 2008), consultant at the World Bank, and has served as a member of the board of directors of Banco Nossa Caixa, Caixa Econômica Federal, Banco Bilbao Vizcaya Argentaria Brasil – BBVA, Vicunha Têxtil S.A., Banco Fibra S.A., among others. Mr. Carvalho also served as Deputy Governor and head of banking supervision of the Central Bank of Brazil (from 1991 to 1993) and as commissioner of the CVM (from 1990 to 1991), among others. Mr. Carvalho received a bachelor’s degree in economics from Universidade de São Paulo – Faculdade de Economia e Administração e Contabilidade and in accounting from Faculdades São Judas Tadeu and a master’s and a Ph.D degree in accounting and controllership from Universidade de São Paulo – Faculdade de Economia e Administração e Contabilidade.

*Aldemir Bendine*—Mr. Bendine has been our Chief Executive Officer since February 2015, and he is also a member of our board of directors and of the board of directors of Petrobras Distribuidora S.A. From April 2009 to January 2015, he served as Chief Executive Officer of Banco do Brasil S.A. Mr. Bendine joined Banco do Brasil in 1978, and from that time until January 2015, he held several different positions, including as vice president of bank cards and new retail businesses (from July 2007 to April 2009), vice president of retail and distribution (from December 2006 to July 2007), executive secretary of the Banco do Brasil board of officers (from July to December 2006), manager of credit and debit cards, division manager and regional manager in Banco do Brasil São Paulo superintendence. Mr. Bendine was a member of the board of officers of Banco Patagônia from October 2010 to early 2015 and Grupo Mapfre – BB SH1 Participações S.A. and Grupo Mapfre – BB SH2 Participações S.A. from June 2011 to early 2015. He served as executive officer of the Febraban, chief executive officer of the *Associação Brasileira de Empresas de Cartões e Serviços – Abecs* from October 2008 to July 2009, chairperson of the board of directors of CBSS (Visa Vale) from February 2007 to March 2010, member of the board of directors of Banco Votorantim S.A. from September 2009 to February 2015 and chief executive officer of BB Administradora de

Cartões S.A. and BB Administradora de Consórcios S.A., among others. Mr. Bendine holds a bachelor's degree in business management as well as master's degrees in business administration for senior executives from the Fundação Instituto de Pesquisas Contábeis, Atuariais e Financeiras—FIPECAFI at Universidade de São Paulo—USP and in finance from Pontifícia Universidade Católica do Rio de Janeiro—PUC-Rio.

*Luciano Galvão Coutinho*—Mr. Coutinho has been a member of our board of directors since April 2008. He has been the Chief Executive Officer of the BNDES since April 2007. In addition, Mr. Coutinho is a member of the board of directors of Vale S.A. (Vale), a member of the Curator Committee for the Fundação Nacional da Qualidade—FNQ (the Brazilian Quality Foundation), and the BNDES representative at the Fundo Nacional de Desenvolvimento Científico e Tecnológico—FNDCT (the Brazilian Fund for Scientific and Technological Development). Mr. Coutinho has a Ph.D. in economics from Cornell University, a master's degree in economics from the Fundação Instituto de Pesquisas Econômicas—Fipe (the Institute of Economic Research) at Universidade de São Paulo-USP and a bachelor's degree in economics from USP. Mr. Coutinho is a visiting Professor at the Universidade Estadual de Campinas ("UNICAMP") at the Universidade de São Paulo-USP, at the University of Paris XIII, at the University of Texas and at the Ortega y Gasset Institute.

Table of Contents

*Roberto da Cunha Castello Branco*—Mr. Castello Branco has been a member of our board of directors since April 30, 2015. From June 1999 to January of 2014 he was the investor relations officer at Vale S.A. Mr. Castello Branco also served as a Deputy Governor of the Central Bank of Brazil (from March 1985 to September 1985), and he was executive director of Banco Boavista and Banco InterAtlântico, president of IBMEC, professor of the Graduate School of Economics at Fundação Getulio Vargas (EPGE/FGV), member of the board of trustees of the Fundação Getulio Vargas, president of the *Instituto Brasileiro de Relações com Investidores*, member of the board of directors of ABRASCA – the Brazilian Association of Public Companies, vice-president of the Brasil-Canada Chamber of Commerce and officer of the American Chamber of Commerce of the State of Rio de Janeiro. He is currently director of the Center for Growth and Economic Development (*Centro de Estudos de Crescimento e Desenvolvimento Econômico*) at Fundação Getulio Vargas. Mr. Castello Branco holds a bachelor’s degree in economics from Faculdade Brasileira de Ciências Econômicas, a Ph.D degree in economics from the graduate school of economics at Fundação Getulio Vargas – EPGE/FGV and a post-doctoral fellow degree in economics from The University of Chicago. He has also participated in executive training programs from the Sloan School of Management, MIT, IMD Business Schools and The University of Chicago Booth School of Business.

*Segen Farin Estefen*—Mr. Estefen has been a member of our board of directors since May 6, 2015, and he is also the chairman of the board of directors of Petrobras Distribuidora S.A since November 4, 2015. He has been an ocean structures and submarine engineering professor at Universidade Federal do Rio de Janeiro – COPPE, where he has been a professor since 1976 and held the position of dean from 1998 to 2001. He is also the general manager of the Submarine Technology Laboratory and the coordinator of the Ocean Renewable Energies Group, both at Universidade Federal do Rio de Janeiro – COPPE, and is a member of the Ocean, Offshore and Arctic Engineering division of the American Society of Mechanical Engineers (ASME), a fellow at the Society for Underwater Technology – SUT, technical coordinator of the Embrapii COPPE unit for submarine engineering and member of the *Academia Nacional de Engenharia - ANE*. He received a bachelor’s degree in civil engineering from Universidade Federal de Juiz de Fora, a master’s degree in ocean engineering from Universidade Federal do Rio de Janeiro – COPPE, a Ph.D degree in civil engineering from Imperial College of Science, Technology and Medicine (London) and has been a post-doctoral research fellow at the Institute for Marine Technology, Norwegian University of Science and Technology.

*Guilherme Affonso Ferreira*—Mr. Ferreira has been a member of our board of directors since May 4, 2015, and he is also a member of the board of directors of Sul America S.A, Gafisa S.A., Valid S.A, Arezzo S.A. and T4F S.A. and a member of the board of directors of non-governmental organizations such as the Institute of Citizenship, AACD, Solidarity Sport, among others. Mr. Ferreira received a bachelor’s degree in engineering from the Polytechnic School of the Universidade de São Paulo-USP and a post-graduate degree in political science from Macalester College.

*Walter Mendes de Oliveira Filho*—Mr. Mendes has been a member of our board of directors since May 4, 2015, and he is also the managing director of the Brazilian Takeover Panel

(*Comitê de Aquisições e Fusões – CAF*) since September 2014 and a member of the Supervisory Board of Investment Analysts at APIMEC- Association of Analysts and Capital Market Professionals since 2011. Previously, Mr. Mendes was a partner and fund manager at Cultinvest Asset Management Ltd (2010-2014). From 2003 to 2010, he was the head of equity funds management of Banco ItauUnibanco S.A. Mr. Mendes worked for Schroder Investment Management for nine years (1994-2003), six of them as the managing officer of its Brazilian office and the remaining years as the managing officer of its Latin America investments, based in London. Mr. Mendes started his career at Unibanco S.A, where he became head of research in 1987. Mr. Mendes holds a bachelor's degree in economics and he also holds a post-graduate degree in economics.

Table of Contents

*Deyvid Souza Bacelar da Silva*—Mr. Bacelar has been a member of our board of directors since April 29, 2015 and he is the representative of our employees. Mr. Bacelar has been a Safety Junior Technician at Petrobras since May 2006 and he is also the General Coordinator of the *Sindicato dos Petroleiros da Bahia* (Oil Workers' Union of the State of Bahia) for the 2014-2017 term. From April 2008 to July 2008, he was an instructor in CETEB – *Centro de Educação Tecnológica do Estado da Bahia* and from November 2007 to February 2008, he was an instructor in SENAI – *Serviço Nacional de Aprendizagem Industrial*. Mr. Bacelar holds a bachelor's degree in business from Universidade Federal da Bahia - UEFS and a specialization degree in human resources from Universidade Federal da Bahia.

### *Executive Officers*

Our board of executive officers, which we refer to as the *diretoria*, is composed of the Chief Executive Officer (CEO) and six executive officers, and is responsible for our day-to-day management. Our executive officers are Brazilian nationals and reside in Brazil. Pursuant to our bylaws, the board of directors elects the executive officers, including the CEO, and in electing executive officers to their respective areas, must consider personal qualification, knowledge and specialization. The maximum term for our executive officers is three years, but re-election is permitted. The board of directors may remove any executive officer from office at any time with or without cause. Four of our current executive officers are experienced Petrobras career managers, engineers or technicians. For further information regarding our board of executive officers, see Exhibit 1.1 for a copy of our bylaws.

On November 25, 2014, our board of directors approved the termination of the Chief International Officer position and the creation of a new executive officer position: Chief Governance, Risk and Compliance Officer. The Chief Governance, Risk and Compliance Officer is charged with ensuring that Petrobras's procedures and guidelines are being observed by Petrobras's management and employees, that Petrobras complies with applicable laws and regulations and that risks of fraud and corruption are mitigated. Besides participating in the decision-making process of our board of executive officers, the Chief Governance, Risk and Compliance Officer must approve any matter submitted to our board of executive officers related to governance, risk and compliance. The Chief Governance, Risk and Compliance Officer will serve for a three-year term, which may be renewed, and such officer can only be removed by the majority of our board of directors, including the vote of at least one director appointed by either the minority preferred shareholders or the minority common shareholders. On January 13, 2015, Mr. João Adalberto Elek Junior was elected to this position by our board of directors, and he was appointed on January 19, 2015.

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

<b>Name</b>	<b>Date of Birth</b>	<b>Position</b>
-------------	----------------------	-----------------

Refining Capacity in Brazil		
-----------------------------	--	--



			<b>Current Term</b>
Aldemir Bendine	December 10, 1963	Chief Executive Officer	April 2018
Ivan de Souza Monteiro	November 15, 1960	Chief Financial Officer and Chief Investor Relations Officer	April 2018
Roberto Moro	November 8, 1962	Chief Production Development and Technology Officer	April 2018
Solange da Silva Guedes	November 22, 1960	Chief Exploration and Production Officer	April 2018
Jorge Celestino Ramos	October 11, 1956	Chief Refining and Natural Gas Officer	April 2018
Hugo Repsold Júnior	July 23, 1959	Chief Human Resources, HSE and Services Officer	April 2018
João Adalberto Elek Junior	November 26, 1958	Chief Governance, Risk and Compliance Officer	April 2018

*Aldemir Bendine* - Mr. Bendine has been our Chief Executive Officer since February 2015. For biographical information regarding Mr. Bendine, see “—Directors.”

Table of Contents

*Ivan de Souza Monteiro* - Mr. Monteiro has been our Chief Financial Officer and Chief Investor Relations Officer since February 2015. Mr. Monteiro previously served as the vice-president of Financial Management and Investor Relations of Banco do Brasil S.A. from June 2009 to February 2015, where he has held different positions, including the position of Chief Commercial Officer and vice-president of Finance, Capital Markets and Investor Relations. He was also president of the Supervision Committee of BB AG, a Banco do Brasil subsidiary in Austria, from April 2014 to February 2015 and president of BB Banco de Investimentos S.A. from June 2009 to February 2012 (and vice-president from February 2012 to February 2015). Mr. Monteiro was also a member of the board of directors of Banco Votorantim Participações S.A. from September 2009 to February 2015, Ultrapar Participações S.A. from March 2013 to February 2015, BB Seguridade Participações S.A. from August 2013 to February 2015 and an alternate member of the board of directors of Mapfre BB SH-2 Participações S.A. from June 2013 to February 2015. Mr. Monteiro holds a degree in electronic engineering and telecommunications from INATEL-MG and an MBA in finance from IBMEC-RJ and in management from the Pontifícia Universidade Católica do Rio de Janeiro – PUC-Rio.

*Roberto Moro* - Mr. Moro has been our Chief Production Development and Technology Officer since April 2016. Mr. Moro joined Petrobras in 1981 and has held various positions in Petrobras's Engineering Projects, including the position of Chief Engineering, Technology and Procurement Officer from February 2015 to March 2016, General Manager for the implementation of Engineering Projects for E&P and Engineering Executive Manager for Subsea Projects from October 2013 to February 2015. Mr. Moro holds a degree in mechanical engineering from Universidade Gama Filho and a specialization in project management from Fundação Getúlio Vargas-FGV.

*Solange da Silva Guedes* - Ms. Guedes has been our Chief Exploration and Production Officer since February 2015. Ms. Guedes joined Petrobras in 1985 and has held various positions in Petrobras's E&P business segment, including the position of Executive Manager of Petrobras's upstream activities in Northern and Northeastern Brazil from February 2003 to April 2008, Executive Manager of Engineering Production in the E&P business segment from April 2008 to December 2013 and Corporate Executive Manager in E&P from December 2013 to February 2015. Ms. Guedes holds a degree in Civil Engineering from the Universidade Federal de Juiz de Fora – UFJF, a master's degree in civil engineering from the Universidade Federal do Rio de Janeiro – UFRJ, a PhD in oil engineering from the Universidade Estadual de Campinas – UNICAMP and an MBA in management from COPPEAD/UFRJ.

*Jorge Celestino Ramos* - Mr. Ramos has been our Chief Refining and Natural Gas Officer since April 2016. Mr. Ramos joined Petrobras in 1983 and has held various positions in Petrobras's distribution and refining segments, including the position of Chief Downstream Officer from February 2015 to March 2016, Executive Manager of Logistics in Downstream from April 2014 to February 2015 and Executive Manager of Operations of Petrobras Distribuidora S.A. from February 2007 to April 2014. Mr. Ramos holds a degree in chemical engineering from the Universidade do Estado do Rio de Janeiro–UERJ and he holds an MBA in marketing from Escola Superior de Propaganda e Marketing - ESPM and in management from Fundação Getúlio Vargas-FGV.

*Hugo Repsold Júnior* - Mr. Repsold has been our Chief Human Resources, HSE and Services Officer since April 2016. Mr. Repsold joined Petrobras in 1985 and has held various positions at Petrobras, including the position of Chief Gas and Power Officer from February 2015 to March 2016, Executive Manager of Performance and Executive Manager of Strategy from September 2011 to May 2012 and Corporate Executive Manager of Gas and Power from May 2012 to February 2015. Mr. Repsold holds a degree in Mechanical Engineering from the Universidade Federal Fluminense-UFF, a degree in economics from the Universidade do Estado do Rio de Janeiro-UERJ and a master's degree in energy planning from the Universidade Federal do Rio de Janeiro (Coppe/PPE-UFRJ).

Table of Contents

*João Adalberto Elek Junior* - Mr. Elek Junior has been our Chief Governance, Risk and Compliance Officer since January 2015. Mr. Elek Junior was Chief Financial Officer at Fibria from August 2010 to February 2012. He has also worked at Telmex and AT&T in Brazil and Latin America, from May 2000 to February 2007, and he served as Chief Financial and Investor Relations Officer at the cable TV and telecommunications firm NET Serviços from March 2007 to July 2010. Mr. Elek Junior also worked for 20 years at Citibank, where he was Chief Financial Officer for retail services from November 1996 to May 2000. Mr. Elek Junior holds a bachelor's degree in electronic engineering from Pontifícia Universidade Católica do Rio de Janeiro – PUC-Rio, an MBA in marketing planning from COPPEAD/UFRJ and graduate studies in mergers and acquisitions from Columbia Business School.

### Compensation

For 2015, the aggregate amount of compensation we paid to all members of the board of directors and executive officers was US\$5.7 million. As of December 31, 2015 we had eight executive officers and fifteen board members (including alternates). The average monthly number of members of our board of directors that received compensation throughout 2015 was 11.33, while the number of executive officers that received compensation during this period did not change. See Note 19.3 to our audited consolidated financial statements for further information regarding compensation of our employees and officers.

In addition, the members of our board of directors and executive officers receive medical assistance benefits, as it is generally provided to our employees and their families. Our executive officers also receive supplementary social security benefits and housing allowance.

We have no service contracts with members of our board of directors providing for benefits upon termination of employment. We have a remuneration and succession committee in the form of an advisory committee. See “—Other Committees.”

### Share Ownership

As of March 31, 2016, the members of our board of directors, our executive officers, and the members of our fiscal council, as a group, beneficially held a total of 5,991 common shares and 38,244 preferred shares of our company. Accordingly, on an individual basis, and as a group, our directors, executive officers, and fiscal council members beneficially owned less than one percent of any class of our shares. The shares held by our directors, executive officers, and fiscal council members have the same voting rights as the shares of the same type and class that are held by our other shareholders. None of our directors, executive officers, and fiscal council members holds any options to purchase common shares or preferred shares nor any other person has any option to purchase our common or preferred shares. Petrobras does not have a stock option plan for its directors, officers or employees.

### Fiscal Council

We have a permanent fiscal council (*Conselho Fiscal*) in accordance with applicable provisions of the Brazilian Corporate Law, composed of up to five members. As required by the Brazilian Corporate Law our fiscal council is independent of our management and external auditors. The fiscal council's responsibilities include, among others: (i) monitoring management's activities and (ii) reviewing our annual report and financial statements. The members and their respective alternates are elected by the shareholders at the annual general shareholder's meeting. Holders of preferred shares without voting rights and minority common shareholders are each entitled, as a class, to elect one member and his respective alternate to the fiscal council. The Brazilian federal government has the right to appoint the majority of the members of the fiscal council and their alternates. One of these members and his respective alternate are appointed by the Minister of Finance, representing the Brazilian Treasury. The members of the fiscal council are elected at our annual general shareholders' meeting for a one-year term and re-election is permitted.

Table of Contents

The following table lists the current members of our fiscal council:

<b>Name</b>	<b>Year of First Appointment</b>
Paulo José dos Reis Souza	2012
César Acosta Rech	2008
Marisete Fátima Dadald Pereira	2011
Reginaldo Ferreira Alexandre	2013
Walter Luis Bernardes Albertoni	2013

The following table lists the alternate members of our fiscal council:

<b>Name</b>	<b>Year of First Appointment</b>
Paula Bicudo de Castro Magalhães	2015
Symone Christine de Santana Araújo	2015
Agnes Maria de Aragão da Costa	2015
Mário Cordeiro Filho	2013
Roberto Lamb	2013

### **Audit Committee**

We have a statutory Audit Committee that advises our board of directors, composed exclusively of members of our board of directors. Our Audit Committee must be composed by at least three members.

On June 17, 2005, our board of directors approved the appointment of our Audit Committee to satisfy the audit committee requirements of the Sarbanes-Oxley Act of 2002 and Rule 10A-3 under the Securities Exchange Act of 1934. On February, 26, 2016, our board of directors approved changes to the written charter of our Audit Committee so that it now adheres to the rules set forth in Instrução CVM No. 509/2011 (“ICVM 509”) applying to statutory audit committees.

The Audit Committee is responsible for, among other matters:

- making recommendations to our board of directors with respect to the appointment, compensation, retention and dismissal of our independent auditor as well as overseeing the independence and the performance of our independent auditors and the integrity of the audit process as a whole;

- reviewing our financial statements, related financial disclosures and the effectiveness of our internal controls over financial reporting in consultation with internal and independent auditors prior to their analysis by our board of directors, monitoring compliance with relevant legal and listing requirements;
- monitoring and obtaining assurance from our management that financial risks are properly mitigated or addressed within the organization and that our internal control over financial reporting systems are designed and implemented to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements;
- assisting in the resolution of conflicts between management and the independent auditor with respect to our financial statements;
- conducting at least once a year an annual review of related party transactions; and
- establishing and reviewing procedures for the receipt, retention and treatment of complaints regarding accounting, internal control and auditing matters, including procedures for the confidential, anonymous submission of concerns regarding questionable accounting or auditing matters, as well as the treatment of any such complaints.

The current members of our Audit Committee are Walter Mendes de Oliveira Filho, Jerônimo Antunes and Francisco Petros Oliveira Lima Papathanasiadis. All members of our Audit Committee satisfy the requirements set forth in Rule 10A-3 under the Exchange Act.

### Other Committees

Since July 1, 2015, our board of directors has a total of four additional statutory advisory committees:

- *Comitê de Remuneração e Sucessão* (Remuneration and Succession Committee), responsible for advising our board of directors with respect to the compensation of members of our senior management and with respect to Petrobras's general compensation policies and mechanisms, among other matters. The current members of our Remuneration and Succession Committee are Francisco Petros Oliveira Lima Papathanasiadis, Jerônimo Antunes and Walter Mendes de Oliveira Filho;
- *Comitê de Segurança, Meio Ambiente e Saúde* (Health, Safety and Environmental Committee), responsible for advising our board of directors with respect to global policies related to the strategic management of health, safety and environmental issues, among other matters. The current members of our Health, Safety and Environmental Committee are Deyvid Souza Bacelar da Silva, Segen Farid Estefen and Júlio César Maciel Ramundo;
- *Comitê Financeiro* (Finance Committee), responsible for advising our board of directors with respect to risks and strategies concerning financial management. The current members of our Finance Committee are Roberto da Cunha Castello Branco, Guilherme Affonso Ferreira, João Victor Issler and Júlio César Maciel Ramundo; and
- *Comitê Estratégico* (Strategic Committee), responsible for advising our board of directors with respect to our strategic plan, business plan and other guidelines related to our strategy. The current members of our Strategic Committee are Segen Farid Estefen, Luciano Galvão Coutinho, Guilherme Affonso Ferreira and Gustavo Rocha Gatass.

Also, on December 23, 2014, our board of directors announced the formation of a special committee that serves as a reporting line for the internal investigations led by two independent law firms: U.S. firm Gibson, Dunn & Crutcher LLP and Brazilian firm Trench, Rossi e Watanabe Advogados (the "Special Committee"). These internal investigations are focused on collecting evidence regarding the nature, extent and impact of alleged illegal acts that may have been committed against Petrobras, as have been reported in testimony under plea bargain agreements provided to Brazilian courts, as well as to investigate related facts and circumstances that may have a significant impact on our business and results of operations.

This Special Committee acts independently, but it has a direct reporting line to our board of directors. It is responsible for: (i) the approval of independent law firms' plan for the internal investigation; (ii) receiving and analyzing information produced by the independent law firms; (iii) ensuring that the independence of the investigations is not compromised; (iv) analyzing,



approving and enabling the implementation of the recommendations made by the independent law firms; (v) communicating and/or authorizing communication between the independent law firms and the competent authorities, including regulators, regarding the investigation status, its results, as well as measures taken by us in connection with such investigations; (vi) preparing a final report about the results of the independent law firms investigations, as well as providing us with the Special Committee's recommendations to improve our internal policies and procedures.

The Special Committee is composed of three members: two independent individuals from outside the company, a Brazilian and a non-Brazilian, with notable technical expertise, in addition to Petrobras's Chief Governance, Risk and Compliance Officer.

Table of Contents

The following table sets forth certain information with respect to the members of the Special Committee:

<b>Name</b>	<b>Date of Birth</b>	<b>Position</b>
Ellen Gracie Northfleet	February 16, 1948	Member of the Special Committee
Andreas Pohlmann	January 24, 1958	Member of the Special Committee
João Adalberto Elek Junior	November 26, 1958	Member of the Special Committee

*Ellen Gracie Northfleet*—Chief Justice Northfleet has been a member of our Special Committee since December 2014. She has served as Chief Justice of the Brazilian Supreme Court from 2006 to 2008 and was a Justice of the Brazilian Supreme Court from December 2000 to August 2011. Ms. Northfleet was also a Justice of the Regional Federal Court of Appeals -4th Region (*Tribunal Regional Federal – 4ª Região*) from 1989 to 2000 and a Federal Prosecutor (*Procuradora da República*) from 1973 to 1989. Ms. Northfleet is recognized in Brazil and abroad for her expertise and experience with complex legal issues. Ms. Northfleet has an LL.B degree from the Universidade Federal do Rio Grande do Sul-UFRGS and a post-graduate degree in social anthropology from UFRGS as well.

*Andreas Pohlmann*—Dr. Pohlmann has been a member of our Special Committee since December 2014 and a partner at Pohlmann & Company since February 2012. Dr. Pohlmann has served as Chief Compliance Officer of Siemens AG from September 2007 to May 2010 and from May 2010 until November 2011 as a member of the executive board of Ferrostaal AG, responsible for compliance and administration. Dr. Andreas Pohlmann was also the Chief Compliance Officer and member of the Executive Committee of SNC-Lavalin Group Inc. in Montreal, Canada, from 2013 to 2014. Dr. Andreas Pohlmann holds a law degree from Goethe University in Frankfurt and a PhD in law from Tuebingen University.

*João Adalberto Elek Junior*—Mr. Elek Junior has been a member of our Special Committee since January 2015. For biographical information regarding Mr. Elek Junior, see “—Executive Officers”.

### **Ombudsman**

The Petrobras General Ombudsman’s Office has been an official part of our corporate structure since October 2005, when it became directly linked to the board of directors. The General Ombudsman’s Office is the official channel for receiving and responding to denunciations and information regarding possible irregularities in accounting, internal controls and auditing. The General Ombudsman’s Office reports directly to our board of directors and guarantees the anonymity of informants.

Our board of directors has approved the Policies and Directives of the Petrobras Ombudsman, which is an important step in aligning the General Ombudsman's practices with those of the other ombudsman offices in our group, contributing to the improvement of our corporate governance. These policies establish a three-year mandate for the Ombudsman Officer, during which he cannot be discretionarily dismissed by the management, ensuring his independence in performing his duties.

The Ombudsman Officer has also been appointed by our management as the person responsible for the implementation of the Public Access to Information Law (Law No. 12,527/2011), which regulates the constitutional right for people to have access to public information. This law states that all information produced or held in custody by the government and not classified as confidential must become accessible to all citizens. In this respect, the General Ombudsman's Office ensures compliance with the rules on access to information by the public, monitors the implementation of this law and submits periodic reports to our board of directors. It also makes recommendations and provides guidance to Petrobras's business units with respect to the enforcement of this law.

Table of Contents

The Ombudsman Officer, together with Petrobras's Ethics Commission, is also responsible for implementing the Public Federal Employee Conflict of Interest Law (Law No. 12,813/2013) within Petrobras. This law regulates the circumstances in which a conflict may arise between the public interest and the interests of certain current and past employees of the Brazilian federal government, which includes Petrobras, and establishes subsequent restrictions on the activities performed by such people.

The responsibilities of the General Ombudsman Officer includes tasks such as receiving and analyzing demands from our employees concerning the existence of conflict of interests, communicating to stakeholders the results of those analyses, performing preliminary reviews about the existence of potential conflicts of interest, verifying potential conflicts of interest before authorizing employees to engage in certain activities, as well as informing employees on how to prevent or avoid those conflicts.

In May 2015, our board of directors approved an unified Whistleblower Channel applicable for all Petrobras units and all Petrobras subsidiaries. This channel, which began operating in November 2015, and is overseen by the General Ombudsman Office, is in charge of registering formal fraud and reported corruption allegations. Our board of directors also approved the hiring of an independent third party company responsible for receiving any complaints recorded through the Whistleblower Channel. Further information about our Whistleblower program is available at <https://contatoseguro.com.br/petrobras>.

In November 2015, our board of directors approved the appointment of Mário Vinícius Claussen Spinelli as our General Ombudsman. Mr. Spinelli holds a bachelor degree in civil engineer and mathematics as well as a master's degree in public administration. He is also concluding his doctorate studies in public administration and government at the Fundação Getúlio Vargas. Mr. Spinelli is a licensed federal officer of the CGDU, where he has held several positions, including Secretary for Strategic Information and Prevention of Corruption. From January 2015 to November 2015, he worked as Controller General for the State of Minas Gerais, from January 2013 to January 2015, Mr. Spinelli was the Controller General of the municipality of São Paulo, where he was responsible for restructuring the municipality General Ombudsman's Office and from May 2010 to January 2013, he was a member of the Conselho de Controle de Atividades Financeiras – COAF (Council for the Control of Financial Activities).

### **Employees and Labor Relations**

We attract and retain valuable employees by offering competitive compensation and benefits, merit-based promotions and a profit-sharing plan.

The table below shows our employee numbers for the last three years:

	<b>As of December 31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Petrobras employees:</b>			
Parent company	56,874	58,618	62,692
Refining Capacity in Brazil			276

Subsidiaries	14,740	15,293	15,903
Abroad	6,856	6,997	7,516
Total Petrobras Group	<b>78,470</b>	<b>80,908</b>	<b>86,111</b>
<b>Parent company by region:</b>			
Southeastern Brazil	40,326	41,207	43,309
Northeastern Brazil	12,344	12,818	14,651
Other locations	4,205	4,593	4,732
Total parent company	<b>56,874</b>	<b>58,618</b>	<b>62,692</b>

Table of Contents

The table below sets forth the main expenses related to our employees for the last three years:

	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
Salaries	5,723.5	8,001.4	8,184.1
Employee training	92.8	155.1	196.1
Profit-sharing distributions	-	444	520

We maintain relations with 17 Brazilian oil workers' unions and one federation. Approximately 45% of our employees are unionized. We negotiate collective bargaining agreements annually. These agreements are composed of social clauses (which relate to labor and safety conditions and general benefits, among other matters), which are valid for two years, and economic clauses, which are valid for one year. In 2015, oil workers unions organized a series of protests, culminating in a strike lasting 27 days, which impacted our production levels in November 2015. This strike took place during negotiations over the social clauses of the collective bargaining agreement for 2015-2017. By the end of 2015, we concluded negotiations over the economic clauses of the collective bargaining agreements, and employees received a 9.53% increase in wage and benefits, reflecting an adjustment to account for inflation as of September 1, 2015, as measured by the IPCA. The social clauses of our collective bargaining agreements were not amended.

### *Knowledge Transfer Initiatives*

We have developed knowledge management corporate practices, such as Petrobras's Mentoring Program, Shadowing, Lessons Learned and Job Rotation and other initiatives in order to ensure the sharing and dissemination of knowledge within Petrobras through the implementation of several corporate policies. Currently, our efforts are focused on the inclusion of knowledge management in our management processes, as this is an important tool for the management of people, culture, projects and processes. In addition, we have been developing customized projects with Petrobras's business segments to identify, preserve, share and apply relevant knowledge that may positively impact our results.

### *Voluntary Separation Incentive Program – PIDV*

In January 2014, we launched a voluntary separation incentive program with the goal of contributing to the achievement of the performance targets set forth under our previous Strategic Plan, including the improvement of our productivity.

This voluntary separation incentive program has been developed along with knowledge management and managerial succession tools so that all knowledge is retained by Petrobras in this process, allowing a planned and systematic voluntary separation of the employees that

enroll in this program. Voluntary separation of employees under this program must achieve the following results: (i) adjust the number of our personnel to our business needs, (ii) achieve our interests in line with employees' expectations, (iii) preserve existing knowledge within Petrobras and (iv) permit the development of leadership succession plans.

The target group of this voluntary separation incentive program were 12,196 Petrobras employees over the age of 55, regardless of their position in Petrobras that would be eligible to retire under the Brazilian Social Security National Institute rules until the end of incentive program enrollment period (March 31, 2014). Over 8,200 employees have taken advantage of Petrobras's voluntary separation incentive program and were classified into different categories with retirement dates as far into the future as May 2017. From the launch of the program until December 2015, 6,554 employees retired under the program. See Note 22.8 to our audited consolidated financial statements for more information about our 2014 voluntary separation incentive program.

Table of Contents

In April 2016, we announced a new voluntary separation incentive program the (“2016 PIDV”), open to all of our employees, and designed to adjust the size of our workforce to our 2015-2019 Plan, raising productivity and adding value for us. The 2016 PIDV was developed based on the premise of preserving a sufficient number of employees to ensure the regular continuity of our operations, while adjusting the size of our workforce in all business segments. We estimate that approximately 12,000 employees will enroll in the 2016 PIDV, and its implementation will cost us approximately R\$4.4 billion while generating an expected cost saving of R\$33 billion for the 2016-2020 period. Our results of operations in 2016 will be negatively impacted proportionally to the enrollment of our workforce to the 2016 PIDV. The effective cost to implement the 2016 PIDV and the exact result of this cost saving measure will depend on a number of variables.

*Employees Internal Relocation Program – Mobiliza*

In 2013, Petrobras has launched an internal relocation program with a view to make compatible Petrobras’s human resources organizational needs with the interests of its employees by offering to Petrobras’s employees relocation opportunities in areas that will demand an increase in the number of employees in the following years. As such, by proper allocation of Petrobras’s current human resources within our organization, such program reduced the need for additional hiring in the short-term. Between 2013 and 2015, 1,866 employees were relocated under this program.

*Pension and Health Care Plan*

We sponsor a defined benefit pension plan, known as Petros, and a variable contribution pension plan, known as Petros-2, which together cover 96.86% of our employees. The principal objective of our pension plans has been to supplement the social security pension benefits of our employees. Employees, as participants of the plans, make mandatory monthly contributions. Our historical funding policy has been to make monthly contributions to the plans in the amounts determined by the legislation regulating closely-held pension funds and actuarial appraisals. Contributions are intended to provide not only for benefits attributed to service to date but also for those expected to be earned in the future.

The table below shows the benefits paid, contributions made, and outstanding pension and medical liabilities for 2015, 2014 and 2013:

	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
Total benefits paid – pension and medical plans	1,569	1,647	1,535
Total contributions – pension and medical plans(1)	651	812	825
Actuarial liabilities(2)	12,850	17,287	12,573



- 
- (1) Includes contributions by sponsors and employees.  
(2) Unfunded pension and medical plans obligations.

As of August 9, 2002, the Petros Plan stopped admitting new participants and since 2003 we have been engaged in complex negotiations with representatives of the Brazilian Oil Worker's National Union to address the deficits of the plan and develop a supplementary pension plan. We agreed to pay R\$5.8 billion, updated retroactively to December 31, 2006 by the consumer price index (IPCA) plus 6% per year, which will be paid in semi-annual installments until the payment of principal in 2028, as previously agreed during the renegotiation. We have also been subject to material legal proceedings in connection with the Petros Plan. In August 2007, we approved new regulations for the Petros Plan that readjust benefits based on an inflation index rather than through salary readjustments proposed by the sponsors and retirement benefits readjustments proposed by the Brazilian Social Security National Institute.

Table of Contents

In 2007, we implemented the Petros Plan 2, a variable contribution or mixed pension plan, for employees with no supplementary pension plan. A portion of this plan has defined benefits characteristics including risk coverage for disability and death, a guaranty of a minimum benefit and a lifetime income, and the related actuarial obligations are recorded according to the projected credit unit method. The portion of the plan with defined contribution characteristics, earmarked for forming a reserve for programmed retirement, is recognized in the results for the year as the contributions are made.

We maintain a health care benefit plan (AMS), which offers medical benefits and covers all employees (active and retired) together with their dependents. We manage the plan, with the employees contributing 25% of the total amount to cover principal risks and a portion of the costs relating to other types of coverage in accordance with participation tables defined by certain parameters, including salary levels.

Our commitment related to future benefits to plan participants is calculated on an annual basis by an independent actuary, based on the Projected Unit Credit method. The health care plan is not funded or otherwise collateralized by assets. Instead, we make benefit payments based on annual costs incurred by plan participants.

In addition, some of our consolidated subsidiaries have their own benefit plans.

In 2015, contributions paid by Petrobras and its subsidiaries (sponsors) to the pension and medical plans with defined benefit characteristics amounted US\$549 million and contributions paid to the variable portion of our Petros 2 pension plan amounted to US\$222 million.

For further information on risks related to Petros Plan, see Item 3. “Key Information—Risk Factors—Risks Relating to Our Operations—Our commitment to meet the obligations of our pension plan (“Petros”) and health care benefits may be higher than what is currently anticipated, and we may be required to make additional contributions of resources to Petros.” Also, see Notes 4.16, 5.3 and 22 to our audited consolidated financial statements for more information about our Employee Benefits.

## **Item 7. Major Shareholders and Related Party Transactions**

### **Major Shareholders**

Our capital stock is composed of common shares and preferred shares, all without par value. On March 31, 2016, there were 1,414,514,216 outstanding common shares and 1,363,042,328 outstanding preferred shares represented by ADRs. The ratio of our common and preferred shares to ADRs is two shares to one ADR. Except for the increase of our share capital in the past three fiscal years, in the amount of approximately R\$21 million, due to the absorption of a portion of our tax incentive reserves into our share capital, there has been no change in the past three fiscal years in the amount of our issued share capital, the number of our common and preferred shares or the voting rights of our common and preferred shares. See Exhibit 1.1 for a copy of our bylaws.

As of March 31, 2016, approximately 24.33% of our preferred shares and approximately 19.01% of our common shares were held of record in the United States directly or in the form of ADSs.

Under the Brazilian Corporate Law, as amended, the number of non-voting shares of our company may not exceed two-thirds of the total number of shares. The Brazilian federal government is required by law to own at least a majority of our voting stock and currently owns 50.26% of our common shares, which are our only voting shares. The Brazilian federal government does not have any different voting rights, but as long as it holds a majority of our voting stock, it will have the right to elect a majority of our directors, irrespective of the rights our minority shareholders may have to elect directors, set forth in our bylaws.

Table of Contents

The following table sets forth information concerning the ownership of our common shares and preferred shares as of March 31, 2016, by the Brazilian federal government, certain public sector entities and our officers and directors as a group.

<b>Shareholder</b>	<b>Common Shares</b>	<b>%</b>	<b>Preferred Shares</b>	<b>%</b>	<b>Total Shares</b>	<b>%</b>
Brazilian federal government	3,740,470,811	50.26	0	0	3,740,470,811	28.67
BNDES	734,202,699	9.87	161,596,958	2.88	895,799,657	6.87
BNDES Participações S.A.—BNDESPar.	11,700,392	0.16	1,341,348,766	23.94	1,353,049,158	10.37
Caixa de Previdência dos Funcionários do Banco do Brasil — PREVI	13,495,005	0.18	354,865,025	6.33	368,360,030	2.82
Other Brazilian public sector entities.	2,315,636	0.03	667,914	0.01	2,983,550	0.02
All members of the board of directors (permanent and alternate), executive officers and members of our fiscal council (permanent and alternate) (30 people in total)	5,991	0.00	38,244	0.00	44,235	0.00
Others	2,940,263,608	39.51	13,743,525,881	66.82	6,683,789,489	51.24
<b>Total</b>	<b>7,442,454,142</b>	<b>100.00</b>	<b>5,602,042,788</b>	<b>100.00</b>	<b>13,044,496,930</b>	<b>100.00</b>

### Related Party Transactions

We have a policy for related-party transactions, which establishes general guidelines for our engagement in transactions with related parties. This policy seeks, among other goals, to ensure that all transactions involving related parties are entered into on arm's length terms, safeguard our interests and the interests of our shareholders and ensure transparency in the disclosure of information about these transactions. Transactions with related parties carried out by us are reviewed by the audit committee of our board of directors at least once a year.

For additional information regarding our principal transactions with related parties, see Note 19 to our audited consolidated financial statements.

*Board of Directors*

Direct transactions with interested members of our board of directors or our executive officers are monitored by our board of directors, and must follow the conditions of an arms-length transaction and market practice guiding transactions with third parties. None of the members of our board of directors, our executive officers or close members of their families has had any direct interest in any transaction we effected that is or was unusual in its nature or conditions, or material to our business during the current or the three immediately preceding financial years or during any earlier financial year, and which remains in any way outstanding or unperformed. In addition, we have not entered into any transaction with related parties which is or was unusual in its nature or conditions during the current or the three immediately preceding financial years, nor is any such transaction proposed, that is or would be material to our business.

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

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

### *Brazilian Federal Government*

We have engaged, and expect to continue to engage, in the ordinary course of business in numerous transactions with our controlling shareholder, the Brazilian federal government, and with banks and other entities under its control, including financing and banking, asset management and other transactions. The above-mentioned transactions amounted to a net liability of US\$16,990 million as of December 31, 2015. See Note 19.1 to our audited consolidated financial statements for further information about such transactions.

As of December 31, 2015, we had a receivable (the Petroleum and Alcohol Account) from the Brazilian federal government, our controlling shareholder, of US\$219 million. For further information, see Note 19.2 to our audited consolidated financial statements.

In addition, according to Brazilian law, we are only permitted to invest in securities issued by the Brazilian federal government in Brazil. This restriction does not apply to investment outside of Brazil. As of December 31, 2015, the value of these marketable securities that has been directly acquired and held by us amounted to US\$1,115 million.

### *Eletrobras's Subsidiaries*

In 2015, we recognized an allowance for impairment of US\$2,060 million (as compared to US\$1,948 million in 2014) million, to cover certain trade receivables due by companies that operate in the isolated electricity sector in the Northern region of Brazil, which are mostly related to Eletrobras's subsidiaries. For further information, see Note 8.4 to our audited consolidated financial statements.

## **Item 8. Financial Information**

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

See Item 18. "Financial Statements" and "Index to Financial Statements."

### **Legal Proceedings**

We are currently party to numerous legal proceedings relating to civil, administrative, tax, labor, environmental and corporate issues arising in the normal course of our business. These proceedings involve claims for substantial amounts of money and other remedies. Several individual disputes account for a significant part of the total amount of claims against us. Our audited consolidated financial statements only include provisions for probable and reasonably estimable losses and expenses we may incur in connection with pending proceedings. Our material legal proceedings are described in Note 30 to our audited consolidated financial statements included in this annual report, and that description is incorporated by reference under this Item.

Between December 8, 2014 and January 7, 2015, five putative securities class action complaints were filed against us in the SDNY. These actions were consolidated on February 17, 2015 (the "Consolidated Securities Class Action"). The Court appointed a lead plaintiff, Universities Superannuation Scheme Limited ("USS"), on March 4, 2015. USS filed a consolidated amended complaint ("CAC") on March 27, 2015 that purported to be on behalf of investors who: (i) purchased or otherwise acquired Petrobras securities traded on the NYSE or pursuant to other transactions in the U.S. during the period January 22, 2010 and March 19, 2015, inclusive (the "Class Period"), and were damaged thereby; (ii) purchased or otherwise acquired the 2012 Notes pursuant to the 2009 Registration Statement, or the 2013 Notes or 2014 Notes pursuant to the 2012 Registration Statement during the Class Period, and were damaged thereby; and (iii) purchased or otherwise acquired Petrobras securities on the Brazilian stock exchange during the Class Period, who also purchased or otherwise acquired Petrobras securities traded on the NYSE or pursuant to other transactions in the U.S. during the same period.

Table of Contents

The CAC alleged, among other things, that in our press releases, filings with the SEC and other communications, we made materially false and misleading statements and omissions regarding the value of our assets, the amounts of our expenses and net income, the effectiveness of our internal controls over financial reporting, and our anti-corruption policies, due to alleged corruption purportedly in connection with certain contracts, which allegedly artificially inflated the market value of our securities.

On April 17, 2015, Petrobras, PGF and underwriters of notes issued by PGF (the “Underwriter Defendants”) filed a motion to dismiss the CAC.

On July 9, 2015, the judge presiding over the Consolidated Securities Class Action ruled on the motion to dismiss, partially granting our motion. Among other decisions, the judge dismissed claims relating to certain debt securities issued in 2012 under the Securities Act of 1933, as time barred by the Securities Act’s statute of repose and ruled claims relating to securities purchased on the Brazilian stock exchange must be arbitrated, as established in our bylaws. The judge rejected other arguments presented in the motion to dismiss the CAC and, as a result, the Consolidated Securities Class Action continued with respect to other claims.

As allowed by the judge, a second consolidated amended complaint was filed on July 16, 2015, a third consolidated amended complaint was filed on September 1, 2015, which, among other things, extended the Class Period to end on July 28, 2015 and added Petrobras America, Inc. as a defendant, and a fourth consolidated amended complaint (“FAC”) was filed on November 30, 2015. The FAC, brought by lead plaintiff and three other plaintiffs – Union Asset Management Holding AG (“Union”), Employees’ Retirement System of the State of Hawaii, or Hawaii, and North Carolina Department of State Treasurer, or North Carolina (collectively, “class plaintiffs”) – brings those claims alleged in the CAC that were not dismissed or were allowed to be re-pleaded under the judge’s July 9, 2015 ruling.

On December 7, 2015, Petrobras, PGF, Petrobras America, Inc. and the Underwriter Defendants filed a motion to dismiss the FAC.

On December 20, 2015, the judge ruled on the motion to dismiss the FAC, partially granting the motion. Among other decisions, the judge dismissed the claims of USS and Union based on their purchases of notes issued by PGF for failure to plead that they purchased the notes in U.S. transactions. The judge also dismissed claims under the Securities Act of 1933 for certain



purchases for which class plaintiffs had failed to plead the element of reliance. The judge rejected other arguments presented in the motion to dismiss the FAC and, as a result, the Consolidated Securities Class Action will continue with respect to the remaining claims.

On October 15, 2015, class plaintiffs filed a motion for class certification in the Consolidated Securities Class Action, and on November 6, 2015, Petrobras, PGF, Petrobras America, Inc. and the Underwriter Defendants opposed the motion. On February 2, 2016, the judge granted plaintiffs' motion for class certification, certifying a Securities Act Class, represented by Hawaii and North Carolina, and an Exchange Act Class represented by USS.

In addition to the Consolidated Securities Class Action, to date, 29 lawsuits have been filed by individual investors before the same judge in the SDNY (two of which have been stayed), and one has been filed in the United States District Court for the Eastern District of Pennsylvania, consisting of allegations similar to those in the Consolidated Securities Class Action. On August 21, 2015, Petrobras, PGF and underwriters of notes issued by PGF filed a motion to dismiss certain of the individual lawsuits, and on October 15, 2015, the judge ruled on the motion to dismiss, partially granting the motion. Among other decisions, the judge dismissed several Exchange Act, Securities Act and state law claims as barred by the relevant statutes of repose. The judge denied other portions of the motion to dismiss and, as a result, these actions will continue with respect to other claims brought by these class plaintiffs.

Table of Contents

On October 31, 2015, the judge ordered that the individual lawsuits and the Consolidated Securities Class Action shall be tried together in a single trial that will not exceed a total of eight weeks. On November 5, 2015, the judge ordered that the trial shall begin on September 19, 2016, and on November 18, 2015, the judge ordered that any individual action filed after December 31, 2015 will be stayed in all respects until after the completion of the scheduled trial.

These actions are in their early stages and involve highly complex issues that are subject to substantial uncertainties and depend on a number of factors such as the novelty of the legal theories, the information produced in discovery, the timing of court decisions, discovery from adverse parties or third parties, rulings by the court on key issues, analysis by retained experts, and the possibility that the parties negotiate in good faith toward a resolution.

In addition, the claims asserted are broad, span a multi-year period and involve a wide range of activities, and the class plaintiffs have not specified an amount of alleged damages in the Consolidated Securities Class Action or the additional individual actions.

The uncertainties inherent in all such matters affect the amount and timing of the ultimate resolution of these actions. As a result, we are unable to make a reliable estimate of eventual loss arising from the litigation.

Depending on the outcome of the litigation, we may be required to pay substantial amounts, which could have a material adverse effect on our financial condition, consolidated results of operations or consolidated cash flows for an individual reporting period. We have engaged a U.S. firm as legal counsel and intend to defend these actions vigorously.

On February 23, 2016, investment manager EIG Management Company and funds it managed filed a complaint asserting common law claims of fraud, aiding and abetting fraud and civil conspiracy and alleging, among other things, that we purportedly induced plaintiffs to invest in Sete Brasil through memoranda, presentations, and other communications that failed to disclose the alleged corruption scheme that Petrobras and Sete were allegedly engaged in and that plaintiffs' investment in Sete purportedly allowed Petrobras to perpetuate and expand the corruption scheme at the expense of plaintiffs.

### *Investigations Carried out by Authorities*

We have also received a subpoena from the SEC relating to the allegations concerning the Lava Jato investigation and are fully cooperating with the SEC, as well as with the DoJ, as to their investigation into this matter. See Item 3. “Key Information—Risk Factors—Ongoing SEC and DoJ investigations regarding the possibility of non-compliance with the U.S. Foreign Corrupt Practices Act could adversely affect us. Violations of this or other laws may require us to pay fines and expose us and our employees to criminal sanctions and civil suits.” Additionally, the São Paulo State Prosecutor’s Office recently initiated an administrative civil proceeding in order to investigate the existence of potential damages caused by us to those investing in our shares listed in the Brazilian stock exchange as a result of the impact caused by the findings identified in the Lava Jato investigation.

### *Lava Jato Investigation*

Investigation started in 2009 by the Brazilian federal police aimed at criminal organizations engaged in money laundering in several Brazilian states. The Lava Jato investigation is extremely broad and comprises numerous investigations into several criminal practices focusing on crimes committed by individuals in different parts of the country and sectors of the Brazilian economy. Beginning in 2014, the Brazilian Federal Prosecutor’s Office focused part of its investigation on irregularities involving Petrobras’s contractors and suppliers and uncovered a broad payment scheme that involved a wide range of participants, including former Petrobras personnel. For further information regarding the Lava Jato investigation and its impacts on us, see Note 3 to our audited consolidated financial statements.

## Internal Commissions

We periodically establish ad hoc internal commissions (*comissões internas de apuração*) to evaluate our compliance with applicable law and regulations. The scope of each internal commission is established by our management. Upon the conclusion of each internal commission's evaluation, its material findings are used to improve our compliance efforts.

Since the date our last annual report was filed, we have established a number of new internal commissions to evaluate past transactions including pursuant to concerns mentioned in public press reports, including:

- A commission formed on July 22, 2015 to evaluate the hiring process for the Torre Almirante Building lease;
- A commission formed on July 31, 2015 to evaluate possible irregularities with respect to the Okinawa refinery acquisition;
- A commission formed on August 6, 2015 to evaluate possible improper payments and illicit acts with respect to the hiring of Saipem S/A;
- A commission formed on September 15, 2015 to evaluate the possible existence of improper payments from Personal Service and Hope service providers to certain Petrobras managers;
- A commission formed on December 3, 2015 to evaluate and audit possible irregularities in the bidding and contracting processes for rigs and platforms with Grupo Schahin companies;
- A commission formed on December 15, 2015 to evaluate, investigate and audit possible irregularities in establishing the Sondas Project and the agreements between members of Grupo Sete Brasil and Petrobras or Petrobras Netherlands B.V. - PNBV;
- A commission formed on January 7, 2016 to investigate the existence of possible irregularities in the process of negotiating contracts with SBM Offshore;
- A commission formed on January 12, 2016 to investigate the existence of possible irregularities in the contracting process for a DS drilling rig with Ensco-5;

- A commission formed on January 15, 2016 to investigate the existence of possible irregularities in (i) the management process for contracting services, (ii) our partnerships with governmental entities and the (iii) grant of advertisement contributions by our Northeastern unit; and
- A commission formed on March 23, 2016 to evaluate possible irregularities in agreements executed with Keppel Fels.

After analyzing documentation produced internally, the work of each of these commissions will be or has been completed, and if the findings in some instances indicate that certain of Petrobras's former and current employees did not comply with certain of our internal policies, such findings will be or have been sent to applicable Brazilian authorities, as the case may be, (including the Federal Prosecutor's Office, Federal Police, CVM and CGDU) for their assessment. These Brazilian authorities may take legal measures against the individuals involved, and we may take certain actions in accordance with applicable labor laws and our applicable employment and other policies. In this context, in order to improve our governance and internal control practices, we have also created a department - Governance, Risk and Compliance Department, which is led by our new Chief Governance, Risk and Compliance Officer. See Item 6. "Directors, Senior Management and Employees—Directors and Senior Management—Executive Officers".

Table of Contents

Independent from the findings of our internal commissions, and to mitigate potential risks of further non-compliance to our internal policies, Petrobras continued to develop and implement a number of measures aimed at improving corporate governance, our management of processes, risk management and controls, including those related to fraud and corruption, such as a procedures to diligence the integrity of our suppliers and our Corruption Prevention Program, among others. See Item 16B. “Code of Ethics.”

## Dividend Distribution

The table below describes the amount of cash paid in the last three years to our shareholders, in the form of dividends and interest on capital.

	<b>For the Year Ended December 31,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<b>(US\$ million)</b>		
Total amounts paid	-	3,918	2,656

Our board of directors proposed no distribution of dividends in 2016 and 2015 for profits accrued in the years ended December 31, 2015 and 2014 because we reported a loss in such fiscal years. See Note 23.5 to our audited consolidated financial statements.

For information about dividend distribution requirements under Brazilian Corporate Law and our bylaws, see Item 10. “Additional Information—Memorandum and Articles of Incorporation—Payment of Dividends and Interest on Capital,” and Item 10. “—Mandatory Distribution.”

## Item 9. The Offer and Listing

### *Trading Markets*

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

Common Shares	São Paulo Stock Exchange (BM&FBOVESPA)— São Paulo (ticker symbol PETR3);
	Mercado de Valores Latinoamericanos en Euros (Latibex)—Madrid, Spain (ticker symbol XPBR);

Preferred Shares	Bolsa de Comercio de Buenos Aires (BCBA)—Buenos Aires, Argentina (ticker symbol APBR)
	São Paulo Stock Exchange (BM&FBOVESPA)—São Paulo (ticker symbol PETR4);
	Mercado de Valores Latinoamericanos en Euros (Latibex)—Madrid, Spain (ticker symbol XPBRA);
Common ADSs	Bolsa de Comercio de Buenos Aires (BCBA)—Buenos Aires, Argentina (ticker symbol APBRA)
	New York Stock Exchange (NYSE)—New York (ticker symbol PBR)
Preferred ADSs	New York Stock Exchange (NYSE)—New York (ticker symbol PBRA)

Our common and preferred shares have been traded on the BM&FBOVESPA since 1968. Our ADSs representing two common shares and our ADSs representing two preferred shares have been traded on the New York Stock Exchange since 2000 and 2001, respectively. The Bank of New York Mellon serves as depository for both the common and preferred ADSs.

Our common and preferred shares have been traded on the LATIBEX since 2002. The LATIBEX is an electronic market created in 1999 by the Madrid Stock Exchange in order to enable trading of Latin American equity securities in euro denominations.

Our common and preferred shares have been traded on the *Bolsa de Comercio de Buenos Aires* (Buenos Aires Stock Exchange) since 2006.

Table of Contents*Share Price History*

The following table sets forth information for our common shares and preferred shares, as reported by the BM&FBOVESPA, and for our common and preferred ADSs, as reported by the New York Stock Exchange, for the periods indicated. The ratio of our common and preferred shares to ADRs is two shares to one ADR.

	<b>Reais Per Common Share</b>		<b>Reais Per Preferred Share</b>		<b>U.S. Dollars Per Common ADS</b>		<b>U.S. Dollars Per Preferred ADS</b>	
	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>
<b>2010</b>	<b>41.81</b>	<b>26.68</b>	<b>37.50</b>	<b>24.16</b>	<b>48.90</b>	<b>31.90</b>	<b>43.82</b>	<b>28.63</b>
<b>2011</b>	<b>33.65</b>	<b>19.80</b>	<b>29.08</b>	<b>18.21</b>	<b>41.57</b>	<b>21.50</b>	<b>36.22</b>	<b>19.85</b>
<b>2012</b>	<b>27.75</b>	<b>18.24</b>	<b>25.60</b>	<b>17.64</b>	<b>32.12</b>	<b>17.64</b>	<b>29.74</b>	<b>16.99</b>
<b>2013</b>	<b>16.57</b>	<b>15.57</b>	<b>17.63</b>	<b>16.78</b>	<b>14.20</b>	<b>13.34</b>	<b>15.05</b>	<b>14.33</b>
<b>2014</b>	<b>23.29</b>	<b>8.52</b>	<b>24.56</b>	<b>9.18</b>	<b>20.65</b>	<b>6.26</b>	<b>21.86</b>	<b>6.66</b>
First quarter	15.82	12.02	16.75	12.57	13.32	10.27	13.96	10.68
Second quarter	17.92	14.83	19.00	15.32	15.94	13.14	16.99	13.48
Third quarter	23.29	16.05	24.56	17.12	20.65	14.19	21.86	14.89
Fourth quarter	20.75	8.52	22.13	9.18	17.27	6.26	18.44	6.66
<b>2015</b>								
First quarter	9.95	8.04	10.25	8.18	7.65	5.01	7.97	5.10
Second quarter	15.66	10.08	14.38	10.21	10.19	6.35	9.38	6.41
Third quarter	13.64	7.67	12.30	6.44	8.83	3.72	7.93	3.13
September 2015	10.24	7.67	8.82	6.44	5.50	3.72	4.69	3.13
Fourth quarter	10.75	8.31	8.80	6.64	5.68	4.11	4.68	3.29
October 2015	10.75	8.37	8.80	7.02	5.68	4.17	4.68	3.52
November 2015	10.56	8.78	8.50	7.27	5.57	4.57	4.53	3.76
December 2015	9.80	8.31	7.98	6.64	5.09	4.11	4.18	3.29
<b>2016</b>								
First Quarter	10.70	5.91	8.49	4.20	5.86	2.90	4.63	1.99
January 2016	8.67	5.93	6.87	4.20	4.26	2.92	3.37	1.99
February 2016	7.41	5.91	5.14	4.23	3.68	2.90	2.53	2.06
March 2016	10.70	7.57	8.49	5.31	5.86	3.79	4.63	2.69

*BM&FBOVESPA*

As of December 31, 2015, Petrobras's common and preferred shares represented approximately 5.3% of the total market capitalization of the BM&FBOVESPA and Petrobras was the most actively traded company of the BM&FBOVESPA. At December 31, 2015, the aggregate market capitalization of the 359 companies listed on the BM&FBOVESPA was approximately US\$490 billion and the ten largest companies represented approximately



51.5% of the total market capitalization of all listed companies. All the outstanding shares of an exchange-listed company may trade on the BM&FBOVESPA, but in most cases, only a portion of the listed shares are actually available for trading by the public. The remainder is held by small groups of controlling persons, by governmental entities or by one principal shareholder.

Trading directly on the BM&FBOVESPA by a holder not deemed to be a resident of Brazil for Brazilian tax and regulatory purposes (a non-Brazilian holder) is subject to certain limitations under Brazilian foreign investment legislation. Non-Brazilian holders may only trade on the BM&FBOVESPA in accordance with the requirements of CMN Resolution No. 4,373 and Instruction CVM No. 560/2015. CMN Resolution No. 4,373 requires that securities held by non-Brazilian holders be maintained in the custody of, or in deposit accounts with, financial institutions duly authorized by the CVM.

In addition, CVM Rule 560/2015 establishes limited situations where non-Brazilian holders are allowed to trade securities outside Brazilian stock exchanges or qualified over-the-counter markets, such as in transactions involving subscription, redemption, refund of shares and conversion of debentures into shares.

Table of Contents

According to Brazilian regulations, the transfer of the ownership of investments from a non-Brazilian holder to another party through a private transaction is only allowed in limited situations, such as transfers resulting from transactions involving merger, split, amalgamation, corporate reorganizations, stock swaps, or a transfer resulting from bequest or inheritance. Such transfers are also permitted in situations where (i) the final beneficial owner of the transferred investment remains unchanged and (ii) the total amount of securities or financial assets owned, directly or indirectly, by all investors taking part in the transaction remains unchanged. CVM may authorize trades or transfers in other situations upon request by the interested investor. See Item 10. “Additional Information—Exchange Controls” for further information.

**Item 10. Additional Information****Memorandum and Articles of Incorporation***General*

We are a publicly-traded company duly registered with the CVM under identification number 9512. Article 3 of our bylaws establishes our corporate purposes as research, prospecting, extraction, processing, trade and transportation of crude oil from wells, shale and other rocks, of crude oil derivatives, of natural gas and other fluid hydrocarbons, as well as other related or similar activities, such as activities connected with energy, including research, development, production, transportation, distribution, sale and trade of all forms of energy, as well as other related or similar activities. We may conduct outside Brazil, directly or through our subsidiaries, any of the activities within our corporate purpose.

Set forth below is certain information concerning our issued share capital and a brief summary of some significant provisions of our bylaws and Brazilian corporate law. This description does not purport to be complete and is qualified by reference to our bylaws (an English translation of which we have filed with the SEC) and to Brazilian corporate law. See Exhibit 1.1 for a copy of our bylaws.

*Qualification of Directors*

Law No. 12,431/2011, amended the Brazilian Corporate Law by eliminating the previous requirement that the members of a company’s board of directors must be shareholders of the company. Members of our board of executive officers must be Brazilian nationals and reside in Brazil. Our directors and executive officers are prevented from voting on any transaction involving companies in which they hold more than 10% of the total capital stock or of which they have held a management position in the period immediately prior to their taking office. Under our bylaws, shareholders set the aggregate compensation payable to directors, executive officers and members of our fiscal council. The board of directors allocates the compensation among its members and the executive officers.

In addition, Law No. 12,353/2010 requires that public and mixed-capital companies, in which the Brazilian federal government holds a majority of the voting rights directly or indirectly, include as a member of the board of directors a representative elected by the company's employees by means of a separate voting procedure.

### *Allocation of Net Income*

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

Table of Contents

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

As long as we are able to make the minimum mandatory distribution described below, we must allocate an amount equivalent to 0.5% of subscribed and fully paid-in capital at year-end to a statutory reserve. The reserve is used to fund the costs of research and technological development programs. The accumulated balance of this reserve cannot exceed 5% of the subscribed and fully paid-in capital stock.

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

- first, a percentage of net income may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the reasons justifying the reserve cease to exist, or written off in the event that the anticipated loss occurs;
- second, if the mandatory distributable amount exceeds the sum of realized net income in a given year, this excess may be allocated to an unrealized revenue reserve. Brazilian Corporate Law defines realized net income as the amount of net income that exceeds the sum of the net positive result of equity adjustments and profits or revenues from operations whose financial results take place after the end of the next succeeding fiscal year; and
- third, a portion of our net income that exceeds the minimum mandatory distribution may be allocated to fund working capital needs and investment projects, as long as such allocation is based on a capital budget previously approved by our shareholders. Capital budgets for more than one year must be reviewed at each annual shareholder meeting.

### *Mandatory Distribution*

Under Brazilian Corporate Law, the bylaws of a Brazilian corporation such as ours may specify a minimum percentage of the amounts available for distribution by such corporation for each fiscal year that must be distributed to shareholders as dividends or interest on capital, also known as the mandatory distributable amount, which cannot be lower than 25% of the adjusted net income for the fiscal year. Under our bylaws, the mandatory distributable amount has been fixed at an amount equal to not less than 25% of our adjusted net income, after deducting allocations to the legal reserve, tax incentives reserve (if any), contingency reserve (if any), and adding reversed contingency reserve amounts from prior years (if any), as set forth in the Brazilian Corporate Law. Furthermore, the net income that are not allocated to the reserves above, to fund working capital needs and investment projects as described above, or to the statutory reserve must be distributed to our shareholders as

dividends or interest on capital.

As a Brazilian corporation with a class of non-voting shares and pursuant to our bylaws, to the extent that we declare dividends, holders of preferred shares are entitled to minimum annual non-cumulative preferential dividends equal to the higher of (i) 5% of their pro rata share of our paid-in capital, or (ii) 3% of the book value of their preferred shares.

Table of Contents

To the extent that we declare dividends on our common shares in any particular year in an amount that exceeds the minimum preferential dividends due to our preferred shares, holders of preferred shares would be entitled to an additional dividend amount per share, such that holders of preferred shares will receive the same additional dividend amount per share paid to holders of common shares. Holders of preferred shares participate equally with common shareholders in share capital increases obtained from the incorporation of reserves and profits.

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

### *Payment of Dividends and Interest on Capital*

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

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

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

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

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

Law, we are required to distribute to shareholders an amount sufficient to ensure that the net amount received, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on capital, is at least equal to the mandatory dividend.

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

Table of Contents

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

### *Shareholders' Meetings*

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

Since 2012, we have convened our shareholders' meetings by publishing a notice in the *Diário Oficial do Estado do Rio de Janeiro* and *Jornal Valor Econômico*. The notice must be published no fewer than three times, beginning at least 30 calendar days prior to the scheduled meeting date. The notice must contain the meeting's agenda and, in the case of a proposed amendment to the bylaws, an indication of the subject matter. For ADS holders, we are required to provide notice to the ADS depository at least 30 calendar days prior to a shareholders' meeting. Upon receipt of our shareholders' meeting notice, the depository must mail a notice, in a form of its choice, to the ADS holders. This notice must contain (i) the information from our notice of meeting sent to the ADS depository; (ii) a statement that owners of record, as of a specific record date, can instruct the depository as to the exercise of their voting rights, subject to Brazilian law as well as our bylaws; and (iii) a statement as to the manner in which these instructions can be given to the depository.

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

In order for a valid action to be taken at a shareholders' meeting, shareholders representing at least one quarter of our issued and outstanding common shares must be present at the meeting. However, in the case of a general meeting to amend our bylaws, shareholders representing at least two-thirds of our issued and outstanding common shares must participate in person. If no such quorum is present, the board may call a second meeting giving at least eight calendar days' notice prior to the scheduled meeting in accordance with the rules of publication described above. The quorum requirements will not apply to the second meeting, subject to the voting requirements for certain matters described below. Our shareholders may also register online to exercise their voting rights electronically in shareholders' meetings. In addition, our shareholders may also vote electronically in proxy contests (*pedido público de procuração*). Electronic participation in shareholders' meetings is not available to our ADS holders. ADS holders may instruct the depository in advance to vote on their behalf at the shareholders' meetings, pursuant to depository's operational procedures and the deposit agreement.



*Voting Rights*

Pursuant to the Brazilian Corporate Law and our bylaws, each of our common shares carries the right to vote at a general meeting of shareholders. The Brazilian federal government is required by law to own at least a majority of our voting stock. Pursuant to Brazilian Corporate Law and our bylaws, except for (i) the right to appoint one member of our board of directors and one member of our fiscal council, and (ii) very few circumstances related to adversely affected preferred shares (as further discussed below), our preferred shares do not confer voting rights.

Table of Contents

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

- amend our bylaws;
- approve any capital increase;
- approve any capital reduction;
- elect or dismiss members of our board of directors and fiscal council (and their respective alternates), subject to the right of our preferred shareholders to elect or dismiss one member of our board of directors and to elect one member of our fiscal council (and their respective alternates);
- receive the yearly financial statements prepared by our management and accept or reject management's financial statements, including the allocation of net income for payment of the mandatory dividend and allocation to the various reserve accounts;
- authorize the issuance of debentures, except for the issuance of non-convertible unsecured debentures, which may be approved by our board of directors;
- suspend the rights of a shareholder who has not fulfilled the obligations imposed by law or by our bylaws;
- accept or reject the valuation of assets contributed by a shareholder in consideration for issuance of capital stock;
- pass resolutions to approve corporate restructurings, such as mergers and spin-offs;
- participate in a centralized group of companies;
- approve the disposal of the control of our subsidiaries;
- approve the disposal of convertible debentures issued by our subsidiaries and held by us;
- establish the compensation of our senior management;
- approve the cancellation of our registration as a publicly-traded company;
- decide on our dissolution;
- waive the right to subscribe to shares or convertible debentures issued by our subsidiaries or affiliates; and

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

Except as otherwise provided by law, resolutions of a general shareholders' meeting are passed by the majority of the outstanding common shares. Abstentions are not taken into account.

Table of Contents

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

- reduction of the mandatory dividend distribution;
- merger into another company or consolidation with another company, subject to the conditions set forth in the Brazilian Corporate Law;
- participation in a group of companies subject to the conditions set forth in the Brazilian Corporate Law;
- change of our corporate purpose, which must be preceded by an amendment in our bylaws by federal law as we are controlled by the government and our corporate purpose is established by law;
- spin-off of a portion of our company, subject to the conditions set forth in the Brazilian Corporate Law; and
- transfer of all our shares to another company or receipt of shares of another company in order to make the company whose shares are transferred a wholly-owned subsidiary of such company, known as *incorporação de ações*.

Under Brazilian Corporate law, if a shareholder has a conflict of interest with the company in connection with any proposed transaction, the shareholder may not vote in any decision regarding such transaction. For example, an interested shareholder may not vote to approve the valuation of assets contributed by that shareholder in exchange for capital stock or, when the shareholder is a member of senior management, to approve the management's report on the company's financial statements. Any transaction approved with the vote of a shareholder having a conflict of interest may be annulled and such shareholder may be liable for any damages caused and be required to return to the company any gain it may have obtained as a result of the transaction.

Under Brazilian Corporate Law, the following actions shall be submitted for approval or ratification by the outstanding adversely affected preferred shares before they are submitted for approval of at least half of the issued and outstanding common shares:

- creation of preferred shares or increase in the existing classes of preferred shares, without preserving the proportions to any other class of preferred shares, except as set forth in or authorized by the company's bylaws;
- change in the preferences, privileges or redemption or amortization conditions of any class of preferred shares; and

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

Decisions on our transformation into another type of company will require a previous amendment of the Brazilian Corporate Law and Federal Law 9,478/1997.

Table of Contents

Under Brazilian Corporate Law, minority shareholders representing at least 10% of the company's voting capital have the right to demand that a cumulative voting procedure be adopted to entitle each common share to as many votes as there are board members and to give each common share the right to vote cumulatively for only one candidate or to distribute its votes among several candidates. Pursuant to regulations promulgated by the CVM, the 10% threshold requirement for the exercise of cumulative voting procedures may be reduced depending on the amount of capital stock of the company. For a company like Petrobras, the threshold is 5%. Thus, shareholders representing 5% of our voting capital may demand the adoption of a cumulative voting procedure.

Furthermore, minority common shareholders also have the right to appoint and/or dismiss one member to or from our board of directors and to appoint or dismiss one member to or from our fiscal council (and such members' respective alternate).

Preferred shareholders holding, individually or as a group, 10% of our total capital also have the right to appoint and/or dismiss one member to or from our board of directors. Preferred shareholders have the right to separately appoint one member to our fiscal council (and such member's respective alternate).

In addition, pursuant to Law No. 12,353, our employees have the right to appoint or dismiss one member of our board of directors (and such member's respective alternate) in accordance with a separate voting procedure.

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

### *Preemptive Rights*

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

A period of at least 30 days following the publication of notice of the issuance of new shares or securities convertible into shares is allowed for exercise of the right, and the right is negotiable.

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

### *Redemption and Rights of Withdrawal*

Brazilian law provides that, under limited circumstances, shareholders have the right to withdraw their equity interest from the company and to receive payment for the portion of shareholder’s equity attributable to their equity interest.

Table of Contents

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

- to create preferred shares or to increase the existing classes of preferred shares, without preserving the proportions to any other class of preferred shares, except as set forth in or authorized by our bylaws; or
- to change the preferences, privileges, redemption or amortization conditions of any class of preferred shares or to create a new class of preferred shares entitled to more favorable conditions than the existing classes.

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

- to merge into another company or to consolidate with another company, provided that certain conditions set forth in the Brazilian Corporate Law are met; or
- to participate in a centralized group of companies as defined under the Brazilian Corporate Law, provided that certain conditions set forth therein are met.

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

- to reduce the mandatory distribution of dividends;
- to change our corporate purposes;
- to spin-off a portion of our company, provided that certain conditions set forth in the Brazilian Corporate Law are met;
- to transfer all of our shares to another company or to receive shares of another company in order to make the company whose shares are transferred a wholly owned subsidiary of our company, known as *incorporação de ações*, provided that certain conditions set forth in the Brazilian Corporate Law are met; or
- to acquire control of another company at a price that exceeds the limits set forth in the Brazilian Corporate Law, provided that certain conditions set forth therein are met.

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





Table of Contents

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

*Other Shareholders' Rights*

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

- the right to participate in the distribution of profits;
- the right to participate equally and ratably in any remaining residual assets in the event of liquidation of the company;
- the right to supervise the management of the corporate business as specified in the Brazilian Corporate Law;
- the right to preemptive rights in the event of a subscription of shares, debentures convertible into shares or subscription bonuses (other than with respect to a public offering of such securities, as may be set out in the bylaws); and
- the right to withdraw from the company in the cases specified in the Brazilian Corporate Law.

*Liquidation*

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

*Conversion Rights*

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

*Liability of Our Shareholders for Further Capital Calls*

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

*Form and Transfer*

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

Table of Contents

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

### *Dispute Resolution*

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

In accordance with Law No. 9,307/1996, entities that are part of the direct and indirect public administration, as we and our controlling shareholder are, may use arbitration as a dispute resolution mechanism only for disputes involving negotiable economic rights. As a result, such entities cannot submit to arbitration any non-negotiable rights (*direitos indisponíveis*), such as those deemed to relate to public interest. Therefore, decisions of the Brazilian federal government exercised through voting in any general shareholders' meeting, if based or related to public interest, will not be subject to an arbitration proceeding.

### *Self-Dealing Restrictions*

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

- refrain from dealing with our securities either in the one-month period prior to any fiscal year-end, up to the date when our financials are published, or in the period between any corporate decision to raise or reduce our stock capital, to distribute dividends or stock, and to issue any security, up to the date when the respective public releases are published; and
- communicate to us and to the stock exchange their periodical dealing plans with respect to our securities, if any, including any change or default in these plans. If the communication is an investment or divestment program, the frequency and planned quantities must be included.

### **Restrictions on Non-Brazilian Holders**

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

However, the ability to convert dividend payments and proceeds from the sale of common or preferred shares or preemptive rights into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other steps, the registration of the relevant investment with the Central Bank of Brazil. Nonetheless, any non-Brazilian holder who registers with the CVM in accordance with CMN Resolution No. 4,373 may buy and sell securities directly on the BM&FBOVESPA. Such non-Brazilian holders must appoint a local representative in Brazil who will be required, among other duties, to register and keep updated with the Central Bank of Brazil the record of all transactions of such investors on the BM&FBOVESPA.

In addition, Annex II to CMN Resolution No. 4,373 allows Brazilian companies to issue depositary receipts in foreign exchange markets. We currently have an ADR program for our common and preferred shares duly registered with the CVM and the Central Bank of Brazil. The proceeds from the sale of ADSs by holders outside Brazil are free of Brazilian foreign exchange controls.

### **Transfer of Control**

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

### **Disclosure of Shareholder Ownership**

Brazilian regulations require that (i) direct or indirect controlling shareholders, (ii) shareholders who have elected members of our board of directors or of our fiscal council, as well as (iii) any person or group of persons representing the same interest, in each case that has directly or indirectly acquired or sold an interest that exceeds (either upward or downward) the threshold of 5%, or any multiple thereof, of the total number of shares of any type or class must disclose its share ownership or divestment, immediately after the event, to the CVM and the BM&FBOVESPA.

### **Material Contracts**

#### *Assignment Agreement (Contrato de Cessão Onerosa)*

On September 3, 2010, we entered into an agreement with the Brazilian federal government, under which it assigned to us the right to conduct activities for the exploration and production of oil, natural gas and other fluid hydrocarbons in specified pre-salt areas, subject to a maximum production of five bnboe. The Assignment Agreement was entered into pursuant to specific provisions of Law No. 12,276. The draft of the Assignment Agreement was approved by our board of directors on September 1, 2010 and by the CNPE on September 1, 2010, following a negotiation between us and the Brazilian federal government based on independent experts reports obtained by us and the ANP according to a valuation procedure as required by Law No. 12,276. See Exhibit 2.78 for an English translation of the Assignment Agreement.

#### *Basic Terms*

*Purpose.* Under the Assignment Agreement, we paid an initial contract price for the right to conduct activities of exploration and production of oil, natural gas and other fluid hydrocarbons in specified pre-salt areas, subject to a maximum production of five bnboe. Although the Assignment Agreement grants certain rights to us that are similar to those of a concession, the Assignment Agreement is a specific regime for exploration and production, not a concession under Brazilian law.

*Area Covered.* The Assignment Agreement covers six firm blocks plus one contingent block, located in the pre-salt areas and identified in the Assignment Agreement. These blocks are located in the Santos Basin and have expected geological characteristics similar to the discoveries made elsewhere in the pre-salt area. On February 7, 2014, we returned to the Brazilian federal government the contingent block related to the Assignment Agreement because we have confirmed that the maximum volume initially provided for in the Assignment Agreement can be reached in the other six firm blocks (i.e., without the need of any contribution from the contingent block).

*Supervision and Inspection.* The ANP has regulatory authority and inspection rights over our activities in the areas subject to the Assignment Agreement, as well as over our compliance with the Assignment Agreement.

*Costs and Risks.* All our exploration, development and production activities under the Assignment Agreement will be conducted at our expense and at our risk.

Table of Contents*Price*

The initial contract price for our rights under the Assignment Agreement was R\$74,807,616,407, which was equivalent to US\$42,533,327,500 as of September 1, 2010. As provided by Law No. 12,276, the contract price was determined by negotiation between us and the Brazilian federal government, based on the reports of independent experts obtained by us and by the ANP, which took into consideration a number of factors, including market conditions, oil prices at that time and industry costs.

We used part of the proceeds from our 2010 global equity offering for the payment of the initial contract price, including the use of Brazilian federal government bonds (*Letras Financeiras do Tesouro*, or LFTs) we received from the Brazilian federal government in such global offering. The LFTs were valued at the same price at which they were valued for purposes of the global offering.

The Assignment Agreement sets forth the initial prices and volumes for each block, as follows:

	<b>INITIAL EVALUATIONS</b>		
	<b>Volume</b> <b>(millions of boe)</b>	<b>Price</b> <b>(US\$/boe)</b>	<b>Value</b> <b>(US\$)</b>
<b>Block 1</b>			
Florim (now Itapu)	467	9.0094	4,207,389,800
<b>Block 2</b>			
Franco (now Búzios)	3,058	9.0400	27,644,320,000
<b>Block 3</b>			
Guará South (now Sapinhoa South)	319	7.9427	2,533,721,300
<b>Block 4</b>			
Surrounding Iara (now Atapu, Berbigão North, Berbigão South, Sururu North and Sururu South)	600	5.8157	3,489,420,000
<b>Block 5</b>			
Tupi South(now Lula South)	128	7.8531	1,005,196,800
<b>Block 6</b>			
Tupi Northeast (now Sepia)	428	8.5357	3,653,279,600
<b>Block 7</b> (contingent block)	—	—	—



Peroba

**Initial Contract Price of the Assignment Agreement****42,533,327,500***Duration*

The term of the Assignment Agreement is 40 years, which may be extended for an additional five years, upon our request, in cases of (i) force majeure, (ii) delay in obtaining applicable environmental licenses, provided that such delay is attributable only to the relevant environmental authority, (iii) suspension of the activities by determination of the ANP, or (iv) changes in the geological conditions forecast for each area. The extension will only apply to areas in which the ANP identifies the occurrence of one of the events specified above. The ANP will take into account the period of time of the delay occurred to determine the length of the extension, subject to the five-year limit indicated above. In addition, the duration of the Assignment Agreement is subject to the revision process.

*Revision*

The Assignment Agreement is subject to a revision process. We have notified the Brazilian federal government and the ANP ten months before the date for the declaration of commerciality of each area covered by the agreement, in order to initiate the arrangements for such revision process, which began immediately after the declaration of commerciality of each field in each of the blocks. The revision process, for all the areas subject to the Assignment Agreement, is currently ongoing and there is no formal or official date for its conclusion.

Table of Contents

The conclusion of the revision process may result in the renegotiation of (i) the contract price, (ii) the maximum production volume of five bnbbl of oil equivalent, (iii) the contract duration, and (iv) the minimum levels of goods and services to be acquired from Brazilian providers.

If the revised contract price is higher than the initial contract price, we may agree with the Brazilian federal government on one or more of the following payment options: (i) a payment to be made by us, in cash or LFTs, to the Brazilian federal government in an amount equal to the difference between the revised contract price (resulting from the revision process) and the initial contract price; or (ii) a reduction in the maximum production volume of five bnbbl of oil equivalent. If the revised contract price is lower than the initial contract price, then the Brazilian federal government will pay us in cash, LFTs, securities issued by us or through other means agreed between us, the difference between the revised contract price and the initial contract price. In either case, the difference between the revised contract price and the initial contract price in U.S. dollars will be converted into Brazilian *reais*, based on the average PTAX exchange rate for the purchase of U.S. dollars published by the Central Bank of Brazil for the 30 days preceding the revision of each area and will be updated by the interest rate of the Brazilian Special Clearance and Custody System (*Sistema Especial de Liquidação e Custódia*), or the SELIC rate, until the payment date. Payments must be made within three years of the completion of the revision process.

The revision process will be based on reports of independent experts to be engaged by us and by the ANP. Among other parameters (including certain parameters pending negotiation), the following will be considered in the revision process:

- Reference Date: for purposes of the economic analysis to occur during the revision process, it has been agreed with the Brazilian federal government that the Reference Date shall be the date of the Declaration of Commerciality of each block. This conclusion, however, is pending from a negotiation with the Brazilian federal government;
- Discount Rate: a discount rate of 8.83% per year;
- Oil Reference Price: will be equal to the average trading price of the month preceding the Reference Date of the revision process (Crude Light West Texas Intermediate — WTI), in US\$/barrel, as published by the New York Mercantile Exchange, the NYMEX, under the code “CL,” for the eighteenth futures contract in terms of maturity, minus the differential in relation to Brent crude oil. The Brent crude oil differential (the price of WTI minus the Brent price) shall be calculated using yearly averages of monthly projections as specified in the most recently published reports of the Pira Energy Group (available on their website for a fee) for the year following the revision, or, if not available, a comparable forecast published by an international entity renowned for its technical competence in the oil and natural gas industry. For each area under the Assignment Agreement, the calculation of the differential of the price of barrel of oil equivalent applicable to each area in relation to Brent crude oil shall be based on the most recent fluid characterization data available as of the revision date, and shall be conducted in accordance with the methodology specified in the ANP Ordinance No. 206/2000.

- Natural Gas Reference Price in US\$/MMBtu: the natural gas reference price equals the price in the reference market (PMR) minus installments in connection with transportation fees (TTr), processing fees (TP), transfer fees (TT) and selling expenses (DC), according to the following formula:  $PRGN = PMR - (TTr + TP + TT + DC)$ , where:
- The price in the reference market (PMR) in US\$/MMBtu is the average sale price of domestic natural gas in the twelve months preceding the revision date, weighed per volume, consistent with our practices of firm commitments to the non-thermoelectric market in the states of Rio de Janeiro and São Paulo.

Table of Contents

- Transportation fees (TTr) in US\$/MMBtu are contractual fees of gas pipelines used to transport natural gas between our processing plants and the delivery points, as follows:  $TTr = \sum TTr(n)$ , where TTr (n) equals the transportation fees of gas pipeline n.
- The processing fees (TP) in US\$/MMBtu are based on the cost of processing pre-salt natural gas, in our Cabiúnas terminal in Macaé, State of Rio de Janeiro, taking into account the revenues from the commercialization of liquid hydrocarbons which will result from the processing of natural gas.
- The transfer fees (TT) in US\$/MMBtu are based on the cost of transferring natural gas from the pre-salt areas from our production units to the Cabiúnas terminal.
- Selling Expenses (DC) in US\$/MMBtu correspond to the costs incurred in the commercialization of natural gas, which include, among others, the preparation and management of natural gas commercialization contracts, logistics costs of supplying natural gas and invoicing costs.
- Calculations of the processing and transfer fees will be based on audited information we have available for similar projects involving processing and transfer of pre-salt natural gas. Calculations of selling expenses will be based on audited information we have available regarding natural gas commercialization.
- Tax: Applicable taxes will be the Brazilian taxes applicable to fields under the Assignment Agreement, in force at the revision period;
- Cost:
  - For operations between the date of the execution of the Assignment Agreement and the revision date, the cost shall be the effective cost incurred by us, in US\$, separately for each area under the Assignment Agreement, provided they have been audited and are consistent with common market practices.
  - Investments and operational costs, and additional future costs will be estimated according to best practices in the oil industry, taking into consideration the operational environment, and based on the market prices practiced for each good or service at the revision date.
  - Lease and rent: in case lease and rent are applicable, they will be considered according to best practices in the oil industry, for production assets including, but not limited to, production units and underwater equipment. Lease and rent payments will be estimated based on daily lease rates of recent lease or rental contracts of Stationary Production Units that have an equivalent market value. Any taxes due pursuant to the remittance of lease and rent payments will be added to the lease and rent payments.

- Investment costs, operating costs and additional expenses will be calculated in U.S. dollars; and
- Exchange Rate: the exchange rate to be applied in the conversions from U.S. dollars to Brazilian *reais* will be the average PTAX exchange rate for the purchase of U.S. dollars (calculated by the Central Bank of Brazil) for the 30 days immediately preceding the payment.

## *Phases*

Our activities under the Assignment Agreement are divided into two phases:

- *Exploration phase.* This phase comprises the appraisal for purposes of determining the commerciality of any discoveries of oil, natural gas and other fluid hydrocarbons. The exploration phase began upon the execution of the Assignment Agreement and ended with the declaration of commerciality of each respective reservoir discovered in each area covered by the Assignment Agreement.
- *Production Phase.* The production phase for a particular discovery begins as of the date of the declaration of commerciality by us to the ANP, and it lasts until the termination of the Assignment Agreement. It comprises a development period, during which we will carry out activities pursuant to a development plan approved by the ANP. Following the development period, we may start production upon notice to the ANP.

## *Minimum Work Program*

During the exploration phase, which is now concluded, we were required to undertake a minimum work program, as specified in the Assignment Agreement as well as additional activities outside the scope of the minimum work program, that were approved by the ANP. We accomplished the minimum work program in all blocks and performed additional activities in some blocks.

## *Reallocation of Volumes*

After the conclusion of the Assignment Agreement revision process, the Brazilian federal government and us may negotiate the reallocation of the volume of oil and natural gas originally assigned for each block, observing the revised price per barrel of oil equivalent applicable to each area, in the following scenarios: (i) the relevant environmental authority does not grant a permanent license for the performance of oil and natural gas exploration and production activities in a certain block or field, or (ii) the production of the volume allotted for any block is not feasible under petroleum industry best practices due to the geological features of the reservoirs, observing the economic parameters established in the revision process (as discussed above).

Once reallocations are completed, the number of barrels of oil equivalent to be produced in the new block will equal the product of (i) the number of barrels of oil equivalent that were reallocated from the original block to the new block and (ii) the value of the barrel of oil equivalent in the original block, to be divided by the value of the barrel of oil equivalent in the new block.

If it is not possible to reallocate all of the volumes of oil and natural gas not produced by us, the reallocation procedure will be performed in part, and the Brazilian federal government will pay us the amount resulting from the multiplication of the volume not subject to the

reallocation by the value of the barrel in the block to which the reallocation has been made. This dollar amount will be converted to *reais* using the average PTAX exchange rate for the purchase of U.S. dollars for the 30 days preceding the date of the reallocation process of such block, and updated by the SELIC rate during the period between the date of the reallocation process of such block and the date of payment by the Brazilian federal government.

If it is determined that it is not possible to reallocate any volumes of oil, natural gas and other hydrocarbons fluids as described above, the Brazilian federal government will reimburse us for an amount equivalent to total volume of barrels of oil equivalent that was not produced multiplied by the dollar price of barrel of oil equivalent applicable to the relevant block, converted in *reais* using the average PTAX exchange rate for the purchase of U.S. dollars for the 30 days preceding the date of the reallocation process, and updated by the SELIC rate from the date of the reallocation process of such block to the date of payment by the Brazilian federal government.

The manner and terms of payment of the reimbursement in either case will be negotiated by us and the Brazilian federal government. Payments will be made no later than three years after the conclusion of the reallocation process.

### *Unitization*

A reservoir covered by a block assigned to us under the Assignment Agreement may extend to adjacent areas outside such block. In such case, we must notify the ANP immediately after identifying the extension and we will be prevented from performing the exploration and production activities within such block, until we have negotiated an unitization agreement with the third-party concessionaire or contractor under a different exploration and production regime who has rights over such adjacent areas, unless otherwise authorized by the ANP. The ANP will determine the deadline for the execution of an unitization agreement by the parties. If the adjacent area is not licensed (e.g., not granted for E&P activities to any other party), the Brazilian federal government, represented by PPSA or by ANP, shall negotiate with us.

If the parties are unable to reach an agreement within a deadline established by the ANP, the agency will determine the terms and obligations related to such unitization, on the basis of an expert report, and will also notify us and the third-party or the Brazilian federal government representative, as applicable, of such determination. Until the unitization agreement is approved by the ANP, operations for the development and production of such reservoir must remain suspended, unless otherwise authorized by the ANP. The refusal of any party to execute the unitization agreement will result in the mandatory return to the Brazilian federal government of the area subject to the unitization process.

Extensions to adjacent areas were identified and notified to the ANP in three of the six blocks of the Assignment Agreement. The ANP authorized us to continue our exploratory activities and instructed us to start negotiating the necessary unitization agreements with third-party concessionaires. These negotiations are being conducted for all three blocks, with no impact on the development phase of these projects.

### *Environmental*

We are required to preserve the environment and protect the ecosystem in the area subject to the Assignment Agreement and to avoid harming local fauna, flora and natural resources. We will be liable for damages to the environment resulting from our operations, including costs related to any remediation measures.

### *Brazilian Content*

The Assignment Agreement requires us to purchase a minimum proportion of goods and services from Brazilian providers and to extend equal treatment to such providers to compete with foreign companies. The minimum Brazilian content requirement is included in the Assignment Agreement and specifies certain equipment, goods and services, as well as different levels of required content, in accordance with the different phases and periods of



activities under the Assignment Agreement. The minimum Brazilian content requirement is 37% for the exploration phase. For the development period, it is (i) 55% for the development periods beginning production by 2016, (ii) 58% for the development periods beginning production between 2017 and 2019, and (iii) 65% for the development periods beginning production from 2020. Despite the minimum percentages set forth for each development period timeframes, the average global percentage of Brazilian content in the development period shall be at least 65%. If we fail to comply with the Brazilian content obligations, we may be subject to fines imposed by the ANP. The Assignment Agreement allows the ANP to grant waivers from the local content requirements, in cases where any of the Assignment Agreement area operational needs (in terms of technology, pricing and timing) cannot be met by local suppliers.

*Royalties and Expenses with Research and Development*

Once we begin commercial production in each field, we will be required to pay monthly royalties of 10% of the oil and natural gas production. We are also required to invest 0.5% of our yearly gross revenues from oil, natural gas and other fluid hydrocarbons production under the Assignment Agreement in research and development activities related to energy and environmental issues being conducted in universities and national research and technical development institutions, public or private, previously registered with the ANP for this purpose.

*Miscellaneous Provisions*

- We shall not assign our rights under the Assignment Agreement.
- The Assignment Agreement shall terminate upon (i) the production of the maximum volume of barrels of oil equivalent as specified in the Assignment Agreement, (ii) the expiration of the term, or (iii) upon the request of the ANP, if we fail to observe the cure period established by the ANP in connection with the breach of an obligation that proves relevant for the continuation of operations in each block. Such cure period may not be less than 90 days, except in cases of extreme emergency.
- We and the Brazilian federal government will only be excused from the performance of the activities set forth in the Assignment Agreement in cases of force majeure, which include, among others, delays in the obtaining an environmental license, provided that such delay is attributable only to the relevant environmental authority.
- The Assignment Agreement is governed by Brazilian law.
- We and the Brazilian federal government will use our best efforts to settle any disputes amicably. If we are unable to do so, we may submit such dispute for arbitral review by the Brazilian Federal Attorney's Office (*Advocacia-Geral da União Federal*), which may rely on independent experts to address technical matters, or initiate a legal proceeding at the Federal Court located in Brasília, Brazil.

*Additional Production in the Assignment Agreement Areas*

In June 2014, the CNPE enacted Resolution No. 1, which established that Petrobras could be directly engaged by the Brazilian federal government under a production sharing regime to produce the volume of oil, natural gas and fluid hydrocarbons from certain designated Assignment Agreement areas that exceeds the maximum production originally agreed for such designated areas under the Assignment Agreement. This excess production would be extracted from the following designated areas regulated by the Assignment Agreement: (i) Búzios, (ii) Entorno de Iara; (iii) Florim and (iv) Nordeste de Tupi. ANP estimates indicate that these four areas may contain additional volumes amounting to between 9.8 bnboe and 15.2 bnboe.

Under the terms of CNPE's approval, Petrobras must share with the Brazilian federal government "profit oil" in exchange for the right to produce these surplus volumes available in the designated Assignment Agreement areas. The Brazilian federal government's share of profit oil will be: (i) 51.37% in Búzios, (ii) 50.60% in Entorno de Iara, (iii) 51.20% in Florim and (iv) 51.48% in Nordeste de Tupi, considering a US\$105.00 price per barrel of crude oil and the average production of 11,000 bbl/d per active production well. CNPE's approval also contemplated Brazilian content requirements.

Table of Contents

The next steps with respect to this CNPE decision involve the negotiation of the terms of different production sharing agreements with the MME, PPSA and the ANP. However, in November 2014, the TCU determined that the execution of these production sharing agreements can be negotiated only after all parameters for the negotiation of the revision process of the Assignment Agreement are agreed between the Brazilian federal government and us. We have not initiated any negotiations and have no estimate for when these production sharing agreements will be executed. The production sharing agreement for each of these four areas will have a term of 35 years.

### *Production Sharing Agreement (Contrato de Partilha de Produção)*

On December 2, 2013, following a public auction held on October 21, 2013, a consortium formed by us (with a 40% interest), Shell (with a 20% interest), Total (with a 20% interest), CNODC (with a 10% interest) and CNOOC (with a 10% interest) (the “Libra Consortium”), entered into a production sharing agreement with the Brazilian federal government, ANP and PPSA (the “Production Sharing Agreement”). Under the agreement, the Libra Consortium was awarded the rights and obligations to operate and explore a strategic pre-salt area known as Libra block, located in the ultra-deep waters of the Santos Basin. This was the first oil and gas production-sharing agreement signed in Brazil under Law 12,351/2010. For further information about Law 12,351/2010, see Item 4. “Information on the Company—Regulation of the Oil and Gas Industry in Brazil—Production-Sharing Contract Regime for Unlicensed Pre-Salt and Potentially Strategic Areas”. See also Exhibit 2.79 for an English translation of the Production Sharing Agreement.

### *Basic Terms*

*Purpose.* The purpose of the Production Sharing Agreement is to execute and manage the exploration and production rights over oil and gas reserves in the Libra block. In accordance with Law No. 12,351/2010, we will be the exclusive operator of exploration and production activities in the Libra block. The Libra Consortium paid R\$15 billion (US\$6.6 billion of which we paid US\$2.6 billion) to the Brazilian federal government as a signing bonus for the execution of the Production Sharing Agreement. Under the terms of the Production Sharing Agreement, upon the declaration of commerciality of the Libra block, the Libra Consortium will recover in oil any royalties expenses, as well as the investments made and recoverable as “cost oil,” and share with the Brazilian federal government “profit oil” produced in exchange for the right to explore and produce oil and gas in the Libra block. The government average share of profit oil will be 41.65%, varying with the price of the barrel of oil and the productivity of the wells. The Production Sharing Agreement established Brent crude oil prices ranging from US\$0.00/bbl to over US\$160.01/bbl and production rates from 0 mbbbl/d to over 24 mbbbl/d for purposes of determining the government average share of profit oil.

*Area Covered.* The Libra block encompasses a pre-salt area covering approximately 1,547.76 km<sup>2</sup> or 0.4 million acres.

*Estimated Recoverable Volume.* The Libra block has an estimated recoverable volume of between 8 and 12 bnboe.

*Operating Committee.* The Libra Consortium is managed by an Operating Committee in which Petrobras, Shell, Total, CNODC, CNOOC and PPSA all participate, where PPSA represents the interests of the Brazilian federal government. The PPSA will not invest in the Libra block, but it holds 50% of the Operating Committee voting rights and also has a casting vote and veto powers, as defined in the Production Sharing Agreement.

Table of Contents

*Risks, Costs and Compensation.* All exploration, development and production activities under the Production Sharing Agreement will be conducted at the expense and risk of the members of the Libra Consortium. For commercial discoveries of crude oil and/or natural gas in the Libra block, the Libra Consortium will be entitled to recover, on a monthly basis, (i) a portion of the production of oil and gas in the Libra block corresponding to its royalty expenses and (ii) the “cost oil” corresponding to costs incurred (which is the amount associated with capital expenditures incurred and operating costs of the Libra Consortium’s exploration and production activities), up to a limit of 50% of gross production in the first two years (which may be extended if any prior costs have not been fully recovered within two years of their actual incurrence) and 30% of gross production in the following years, subject to the conditions, proportions and terms set forth on the Production Sharing Agreement. In addition, for each commercial discovery, the Libra Consortium is entitled to receive, on a monthly basis, its share of “profit oil” as defined under the Production Sharing Agreement.

*Duration*

The term of the Production Sharing Agreement is 35 years, which is not subject to renewal.

*Phases*

Our activities under the Production Sharing Agreement are divided into two phases:

*Exploration phase.* This phase comprises appraisal activities for purposes of determining the commerciality of any discoveries of crude oil and natural gas. The exploration phase began upon the execution of the Production Sharing Agreement and will end for each discovery upon the declaration of commerciality. We will have four years (which may be extended upon ANP’s prior approval, according to the terms and conditions set forth in the Production Sharing Agreement) to comply with the minimum work program and other ANP-approved activities provided for in the Production Sharing Agreement.

*Production Phase.* The production phase for each particular discovery begins as of the date of the declaration of commerciality by the Libra Consortium to the ANP, and lasts until the termination of the Production Sharing Agreement. It comprises a development period, during which we will carry out activities pursuant to a development plan approved by the ANP. We will have a period of five years, counted from the date of the declaration of commerciality, to begin production from the Libra block.

*Minimum Work Program*

During the exploration phase, we are required to undertake a minimum work program, as specified in the Production Sharing Agreement, which includes 3D seismic acquisition for the whole block, two exploratory wells and one extended well test. We may perform other activities outside the scope of the minimum work program, provided that such activities are approved by the ANP.

If the Libra Consortium fails to fulfill the minimum work program, ANP will be able to enforce the financial guaranties provided by the Libra Consortium, but such enforcement would not preclude ANP's right to apply other reasonable remedies.

### *Unitization*

A reservoir covered by a block assigned to us in the Production Sharing Agreement may extend to adjacent areas outside such block. In such case, we must notify the ANP immediately after identifying the extension and we will be prevented from performing development and production activities within such block, until we have negotiated an unitization agreement with the third-party concessionaire or contractor who has rights over such adjacent area, unless otherwise authorized by the ANP. The ANP will determine the deadline for the execution of an unitization agreement by the parties. If the adjacent area is not licensed (i.e., not granted for E&P activities to any other party), the Brazilian federal government, represented by PPSA or by the ANP, shall negotiate with us.

If the parties are unable to reach an agreement within a deadline established by the ANP, the agency will determine the terms and obligations related to such unitization, on the basis of an expert report, and will also notify us and the third-party or the Brazilian federal government representative, as applicable, of such determination. Until the unitization agreement is approved by the ANP, operations for the development and production of such reservoir must remain suspended, unless otherwise authorized by the ANP. The refusal of any party to execute the unitization agreement will result in the termination of the Production Sharing Agreement and the return to the Brazilian federal government of the area subject to the unitization process.

### *Environmental*

We are required to preserve the environment and protect the ecosystem in the area subject to the Production Sharing Agreement and to avoid harming local fauna, flora and natural resources. We will be liable for damages to the environment resulting from our operations, including costs related to any remediation measures.

### *Brazilian Content*

The Production Sharing Agreement requires us to purchase a minimum proportion of goods and services from Brazilian providers and to extend equal treatment to such providers to compete with foreign companies. The minimum Brazilian content requirement is included in the Production Sharing Agreement and specifies certain equipment, goods and services, as well as different levels of required content, in accordance with the different phases and periods of activities under the Production Sharing Agreement. The minimum Brazilian content requirement is 37% for the exploration phase. For the development period, it is (i) 55% for modules beginning first oil through 2021 and (ii) 59% for modules beginning production from 2022. If we fail to comply with the Brazilian content obligations, we may be subject to fines imposed by the ANP. The Production Sharing Agreement allows the ANP to grant waivers from the local content requirements, in cases where any of the Libra Consortium's operational needs (in terms of technology, pricing and timing) cannot be met by local suppliers.

### *Royalties and Expenses with Research and Development*



Once we begin production in each field, members of the Libra Consortium (other than PPSA) will be required to pay monthly royalties of 15% of the oil and natural gas production, to be recovered from a portion of the production of oil and gas in the Libra block. All members of the Libra Consortium (other than PPSA) will also be required to invest 1.0% of their annual gross revenues from crude oil and natural gas production under the Production Sharing Agreement in research and development activities related to the oil, gas and biofuel sectors.

### *Miscellaneous Provisions*

- We can assign our rights and obligations under the Production Sharing Agreement to the extent that such assigned rights and obligations correspond only to those in excess of our 30% minimum interest established by the CNPE. If any proposed assignment is requested, the ANP shall issue an opinion to the MME within 90 (ninety) days, and the MME shall take a decision within 60 (sixty) days after the ANP opinion is received.

Table of Contents

- All members of the Libra Consortium (other than PPSA) have a right of first refusal with respect to an eventual assignment of rights and obligations to be made by any other member of the Libra Consortium (other than PPSA).
- The Production Sharing Agreement shall be terminated in the following circumstances: (i) the expiration of its term; (ii) if the minimum work program has not been completed by the end of the Exploration Phase; (iii) if there has not been any commercial discovery by the end of the Exploration Phase; (iv) if the Libra Consortium members (other than PPSA) exercise their withdrawal rights during the Exploration Phase; (v) if the Libra Consortium refuses to execute a production individualization agreement after the ANP makes such determination (which termination may be complete or partial) and (vi) any other basis described in the Production Sharing Agreement.
- Any breach of the Production Sharing Agreement or of any regulations issued by the ANP may result in sanctions and fines imposed by the ANP on the relevant party, in accordance with applicable legislation and the terms of the Production Sharing Agreement.
- If any breach of the Production Sharing Agreement is considered by the Brazilian federal government not to be significant, intentional, or a result of negligence, imprudence or recklessness, or it is proved that the consortium has worked diligently to cure such breach, the Brazilian federal government may, instead of terminating the Production Sharing Agreement, propose that ANP apply designated sanctions on the relevant parties.
- We and other consortium members will use our best efforts to settle any disputes amicably. If we are unable to do so, any consortium member may submit such dispute or controversy to an *ad hoc* arbitration following the rules established by the United Nations Commission on International Trade Law (UNCITRAL), or by the consent of the parties in interest, to the International Chamber of Commerce, or the ICC, or any other well-regarded arbitration chamber. If a dispute involves only public administration entities, it will be submitted to the *Câmara de Conciliação e Arbitragem da Administração Federal*, or CCAF, under the Brazilian Federal Attorney-General's Office (*Advocacia Geral da União*), or AGU. In event of a dispute involving non-negotiable rights, the parties have consented to submit the dispute to the Federal Courts in Brasília, Brazil.
- The Production Sharing Agreement is governed by Brazilian law.

For information concerning our other material contracts, see Item 4. "Information on the Company" and Item 5. "Operating and Financial Review and Prospects."

## Exchange Controls

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

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

Table of Contents

Foreign investors may generally register their investment under Law No. 4,131/1962 (foreign direct investment) or CMN Resolution No. 4,373 (portfolio investments in regulated market, such as stock exchanges). Registration under CMN Resolution No. 4,373 affords a more favorable tax treatment to foreign investors who are not residents of tax havens, as defined by Brazilian tax laws. See “—Taxation Relating to Our ADSs and Common and Preferred Shares—Brazilian Tax Considerations.”

Under CMN Resolution No. 4,373, foreign investors may invest in almost all financial assets and engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with CMN Resolution No. 4,373, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Under CMN Resolution No. 4,373, a foreign investor must:

- appoint at least one representative in Brazil, with powers to perform actions relating to its investment;
- register as a foreign investor with the CVM;
- appoint at least one authorized custodian in Brazil for its investments; and
- register all of its portfolio investments in Brazil, through its representative, with the Central Bank of Brazil.

Securities and other financial assets held by CMN Resolution No. 4,373 investors must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank of Brazil or the CVM. In addition, any transfer of securities held under CMN Resolution No. 4,373 and Instruction CVM No. 560/2015 must be carried out in the stock exchanges or through organized over-the-counter markets licensed by the CVM, except for transfers resulting from transactions involving merger, split, amalgamation, corporate reorganizations, stock swaps, or a transfer resulting from bequest or inheritance.

Annex II of CMN Resolution No. 4,373 provides for the issuance of depositary receipts in foreign markets with respect to shares of Brazilian issuers. The depositary of the ADSs has obtained from the Central Bank of Brazil an electronic certificate of registration with respect to our existing ADR program. Pursuant to the registration, the custodian and the depositary will be able to convert dividends and other distributions with respect to the relevant shares represented by ADSs into foreign currency and to remit the proceeds outside Brazil.

In the event that a holder of ADSs exchanges such ADSs for the underlying common or preferred shares, the holder will be required to obtain registration as a foreign investor in Brazil pursuant to CMN Resolution No. 4,373 (Annex I), by appointing a local representative and obtaining a certificate of registration from the Central Bank of Brazil. Failure to take these measures may subject the holder to the inability of converting the proceeds from the

disposition of, or distributions with respect to, the relevant shares, into foreign currency and to remit proceeds outside of Brazil. Additionally, the holder may be subjected to a less favorable Brazilian tax treatment than a holder of ADSs. In addition, if the foreign investor resides in a “tax haven” jurisdiction, the investor will be also subject to less favorable tax treatment. See Item 3. “Key Information—Risk Factors—Risks Relating to Our Equity and Debt Securities” and “—Taxation Relating to Our ADSs and Common and Preferred Shares—Brazilian Tax Considerations.”

161

---

## **Taxation Relating to Our ADSs and Common and Preferred Shares**

The following summary contains a description of material Brazilian and U.S. federal income tax considerations that may be relevant to the purchase, ownership and disposition of preferred or common shares or ADSs by a holder. This summary does not describe any tax consequences arising under the laws of any state, locality or taxing jurisdiction other than Brazil and the United States.

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

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

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

### *Brazilian Tax Considerations*

#### *General*

The following discussion summarizes the material Brazilian tax consequences of the acquisition, ownership and disposition of preferred or common shares or ADSs, as the case may be, by a holder that is not deemed to be domiciled in Brazil for purposes of Brazilian taxation, also called a non-Brazilian holder.

Under Brazilian law, investors (non-Brazilian holders) may invest in the preferred or common shares under CMN Resolution No. 4,373 or under Law No. 4,131/1962. The rules of CMN Resolution No. 4,373 allow foreign investors to invest in almost all instruments and to engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are met. In accordance with CMN Resolution No. 4,373, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Pursuant to this rule, foreign investors must: (i) appoint at least one representative in Brazil with powers to perform actions relating to their foreign investment (such as registration and

keeping updated records of all transactions with the Central Bank of Brazil); (ii) complete the appropriate foreign investor registration form; (iii) register as a foreign investor with the CVM; and (iv) register the foreign investment with the Central Bank of Brazil.

Securities and other financial assets held by foreign investors pursuant to CMN Resolution No. 4,373 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the CVM. In addition, securities trading is restricted to transactions carried out in the stock exchanges or organized over-the-counter markets authorized by the CVM.

Table of Contents*Taxation of Dividends*

Generally speaking, dividends paid by us, including stock dividends and other dividends paid in property to the depositary in respect of the ADSs, or to a non-Brazilian holder in respect of the preferred or common shares, are not subject to withholding income tax in Brazil, to the extent that such amounts are related to profits generated after January 1, 1996.

We must pay to our shareholders (including non-Brazilian holders of common or preferred shares or ADSs) interest on the amount of dividends payable to them, updated by the SELIC rate, from the end of each fiscal year through the date of effective payment of those dividends. These interest payments are considered fixed-yield income and are subject to withholding income tax at varying rates depending on the length of period of interest accrual. The tax rate varies from 15%, in case of interest accrued for a period greater than 720 days, 17.5% in case of interest accrued for a period between 361 and 720 days, 20% in case of interest accrued for a period between 181 and 360 days, and to 22.5%, in case of interest accrued for a period up to 180 days. However, the applicable withholding income tax rate over interest is 15% in the case of a non-Brazilian holder of ADSs or direct holder of common or preferred shares who is not resident or domiciled in a country or other jurisdiction that does not impose income tax or imposes it at a maximum income tax rate lower than 17% (a Low or Nil Tax Jurisdiction) or, based on the position of the Brazilian tax authorities, a country or other jurisdiction where the local legislation does not allow access to information related to the shareholding composition of legal entities, to their ownership or to the identity of the effective beneficiary of the income attributed to shareholders (the Non-Transparency Rule). See “—Clarifications on Non-Brazilian Holders Resident or Domiciled in a Low or Nil Tax Jurisdiction.”

*Taxation on Interest on Capital*

Any payment of interest on capital to holders of ADSs or preferred or common shares, whether or not they are Brazilian residents, is subject to Brazilian withholding income tax at the rate of 15% at the time we record such liability, whether or not the effective payment is made at that time. See “—Memorandum and Articles of Incorporation—Payment of Dividends and Interest on Capital.” In the case of non-Brazilian residents that are resident in a Low or Nil Tax Jurisdiction (including in the view of Brazilian authorities the jurisdictions to which the Non-Transparency Rule applies), the applicable withholding income tax rate is 25%. See “—Clarifications on Non-Brazilian Holders Resident or Domiciled in a Low or Nil Tax Jurisdiction.” The payment of interest with respect to updating recorded distributions by the SELIC rate that is applicable to payments of dividends applies equally to payments of interest on capital. The determination of whether or not we will make distributions in the form of interest on capital or in the form of dividends is made by our board of directors at the time distributions are to be made. We cannot determine how our board of directors will make these determinations in connection with future distributions.



### *Taxation of Gains*

For purposes of Brazilian taxation on capital gains, two types of non-Brazilian holders have to be considered: (i) non-Brazilian holders of ADSs, preferred shares or common shares that are not resident or domiciled in a Low or Nil Tax Jurisdiction, and that, in the case of preferred or common shares, have registered before the Central Bank of Brazil and the CVM in accordance with CMN Resolution No. 4,373; and (ii) any other non-Brazilian holder, including non-Brazilian holders who invest in Brazil not in accordance with CMN Resolution No. 4,373 (including registration under Law No. 4,131/1962) and who are resident or domiciled in a Low or Nil Tax Jurisdiction. See “—Clarifications on Non-Brazilian Holders Resident or Domiciled in a Low or Nil Tax Jurisdiction.”

Table of Contents

According to Law No. 10,833/2003, capital gains realized on the disposition of assets located in Brazil by non-Brazilian holders, whether or not to other non-residents and whether made outside or within Brazil, may be subject to taxation in Brazil. With respect to the disposition of common or preferred shares, as they are assets located in Brazil, the non-Brazilian holder may be subject to income tax on any gains realized, following the rules described below, regardless of whether the transactions are conducted in Brazil or with a Brazilian resident. We understand the ADSs do not fall within the definition of assets located in Brazil for the purposes of this law, but there is still neither pronouncement from tax authorities nor judicial court rulings in this respect. Therefore, we are unable to predict whether such understanding will prevail in the courts of Brazil.

Although there are grounds to sustain otherwise, the deposit of preferred or common shares in exchange for ADSs may be subject to Brazilian taxation on capital gains if the acquisition cost of the preferred or common shares is lower than: (i) the average price per preferred or common share on a Brazilian stock exchange on which the greatest number of such shares were sold on the day of deposit; or (ii) if no preferred or common shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of preferred or common shares were sold in the 15 trading sessions immediately preceding such deposit. In such a case, the difference between the amount previously registered and the average price of the preferred or common shares calculated as above, will be considered a capital gain.

The difference between the acquisition cost and the average price of the preferred or common shares calculated as described above will be considered realized capital gain that is subject to taxation as described below. There are grounds to sustain that such taxation is not applicable with respect to non-Brazilian holders registered under the rules of CMN Resolution No. 4,373 and not resident or domiciled in a Low or Nil Tax Jurisdiction.

The withdrawal of ADSs in exchange for preferred or common shares should not be considered as giving rise to a capital gain subject to Brazilian income tax, provided that on receipt of the underlying preferred or common shares, the non-Brazilian holder complies with the registration procedure with the Central Bank of Brazil as described below in "Registered Capital."

Capital gains realized by a non-Brazilian holder on a sale or disposition of preferred or common shares carried out on a Brazilian stock exchange (which includes transactions carried out on the organized over-the-counter market) are:

- exempt from income tax when the non-Brazilian holder (i) has registered its investment in accordance with CMN Resolution No. 4,373 and (ii) is not resident or domiciled in a Low or Nil Tax Jurisdiction;
- subject to an income tax at a 25% rate, in cases of gains realized by a non-Brazilian holder resident or domiciled in a Low or Nil Tax Jurisdiction or a jurisdiction to which the Non-Transparency Rule applies. In this case, a withholding income tax at a rate of 0.005% of

the sale value is levied on the transaction which can be offset against the eventual income tax due on the capital gain; or

- in all other cases, including a case of capital gains realized by a non-Brazilian holder that is not registered in accordance with CMN Resolution No. 4,373, subject to income tax at a 15% rate. In these cases, a withholding income tax at a rate of 0.005% of the sale value is levied on the transaction which can be offset against the eventual income tax due on the capital gain.

Any capital gains realized on a disposition of preferred or common shares that is carried out outside the Brazilian stock exchange are subject to income tax at the rate of 15%, or 25% in case of gains realized by a non-Brazilian holder that is domiciled or resident in a Low or Nil Tax Jurisdiction or a jurisdiction to which the Non-Transparency Rule applies. In this last case, for the capital gains related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation, the withholding income tax of 0.005% will also apply and can be offset against the eventual income tax due on the capital gain.

### *Additional Recent Rules Regarding Taxation of Gains*

On March 16, 2016, the Brazilian federal government converted the Provisional Measure No. 692 into Law No. 13,259, which established progressive income tax rates applicable to capital gains derived from the disposition of assets by Brazilian individuals. Law No. 13,259 provides for new rates that range from 15% to 22.5% depending on the amount of the gain recognized by the Brazilian individual, as follows: (i) 15% on gains not exceeding R\$5,000,000.00; (ii) 17.5% on gains that exceed R\$5,000,000.00 and do not exceed R\$10,000,000.00; (iii) 20% on gains that exceed R\$10,000,000.00 and do not exceed R\$30,000,000.00; and (iv) 22.5% on gains exceeding R\$30,000,000.00. Pursuant to Section 18 of Law No. 9,249/95, the tax treatment applicable to capital gains earned by Brazilian individuals also applies to capital gains earned by non-Brazilian residents (in transactions not carried out on the Brazilian stock exchange or in organized over-the-counter markets). Law No. 13,259 states that its provisions are effective as of January 1, 2016 but we expect that Brazilian courts will deem this law effective starting on January 1, 2017.

In the case of a redemption of preferred or common shares or ADSs or a capital reduction made by us, the positive difference between the amount received by the non-Brazilian holder and the acquisition cost of the preferred or common shares or ADSs redeemed or reduced is treated as capital gain derived from the sale or exchange of shares not carried out on a Brazilian stock exchange market and is therefore generally subject to income tax at the rate of 15% or 25%, as the case may be. See “—Clarifications on Non-Brazilian Holders Resident or Domiciled in a Low or Nil Tax Jurisdiction.”

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

No assurance can be made that the current preferential treatment of non-Brazilian holders of the ADSs and some non-Brazilian holders of the preferred or common shares under CMN Resolution No. 4,373 will continue to apply in the future.

### *Clarifications on Non-Brazilian Holders Resident or Domiciled in a Low or Nil Tax Jurisdiction*

Law No. 9,779/1999 states that, except for limited prescribed circumstances, income derived from transactions by a person resident or domiciled in a Low or Nil Tax Jurisdiction will be subject to withholding income tax at the rate of 25%. A Low or Nil Tax Jurisdiction is generally considered to be a country or other jurisdiction which does not impose any income tax or which imposes such tax at a maximum rate lower than 17%. Under certain circumstances, the Non-Transparency Rule is also taken into account for determining whether a country or other jurisdiction is a Low or Nil Tax Jurisdiction. In addition, Law No. 11,727/2008 introduced the concept of a “privileged tax regime”, which is defined as a tax regime which (i) does not tax income or taxes it at a maximum rate lower than 17%; (ii) grants tax benefits to non-resident entities or individuals (a) without the requirement to carry out a substantial economic activity

in the country or other jurisdiction or (b) contingent on the non-exercise of a substantial economic activity in the country or other jurisdiction; (iii) does not tax or that taxes foreign source income at a maximum rate lower than 17%; or (iv) does not provide access to information related to shareholding composition, ownership of assets and rights or economic transactions carried out. We believe that the best interpretation of Law No. 11,727/2008 is that the concept of a “privileged tax regime” will apply solely for purposes of the transfer pricing rules in export and import transactions, deductibility for Brazilian corporate income taxes and the thin capitalization rules and, would therefore generally not have an impact on the taxation of a non-Brazilian holder of preferred or common shares or ADSs, as discussed herein. However, we are unable to ascertain whether the privileged tax regime concept will also apply in the context of the rules applicable to Low or Nil Tax Jurisdictions, although the Brazilian tax authorities appear to agree with our position, in view of the provisions of the Normative Ruling No. 1,037 of June 4, 2010.

Table of Contents*Taxation of Foreign Exchange Transactions (IOF/Exchange)*

Brazilian law imposes the IOF/Exchange on the conversion of *reais* into foreign currency and on the conversion of foreign currency into *reais*. Currently, for most foreign currency exchange transactions, the rate of IOF/Exchange is 0.38%. However, foreign exchange transactions related to inflows of funds to Brazil for investments made by foreign investors in the Brazilian financial and capital markets are generally subject to IOF/Exchange at a zero percent rate. Foreign exchange transactions related to outflows of proceeds from Brazil in connection with investments made by foreign investors in the Brazilian financial and capital markets are also subject to the IOF/Exchange tax at a zero percent rate. This zero percent rate applies to payments of dividends and interest on capital received by foreign investors with respect to investments in the Brazilian financial and capital markets, such as investments made by a non-Brazilian holder as provided for in CMN Resolution No. 4,373. The Brazilian Executive Branch may increase such rates at any time, up to 25% of the amount of the foreign exchange transaction, but not with retroactive effect.

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

Brazilian law imposes IOF/Bonds on transactions involving equity securities, bonds and other securities, including those carried out on a Brazilian stock exchange. The rate of IOF/Bonds applicable to transactions involving preferred or common shares is currently zero. However, the Brazilian federal government may increase such rate at any time up to 1.5% of the transaction amount per day, but the tax cannot be applied retroactively.

The IOF on transfer of shares, which are admitted to trading on a stock exchange located in Brazil, with the specific purpose of backing the issuance of depositary receipts traded abroad have been reduced from 1.5% to zero, as of December 24, 2013.

*Other Brazilian Taxes*

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of preferred or common shares or ADSs by a non-Brazilian holder, except for gift and inheritance taxes which are levied by certain states of Brazil on gifts made or inheritances bestowed by a non-Brazilian holder to individuals or entities resident or domiciled within such states in Brazil. There are no Brazilian stamp, issue, registration, or similar taxes or duties payable by holders of preferred or common shares or ADSs.

*Registered Capital*

The amount of an investment in preferred or common shares held by a non-Brazilian holder who obtains registration under CMN Resolution No. 4,373, or by the depositary representing such holder, is eligible for registration with the Central Bank of Brazil; and such registration allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized with respect to dispositions of, such preferred or common shares. The amount registered (“registered capital”)

for each preferred or common share purchased as part of the international offering or purchased in Brazil after the date hereof, and deposited with the depository, will be equal to its purchase price (in U.S. dollars). The registered capital for a preferred or common share that is withdrawn upon surrender of an ADS will be the U.S. dollar equivalent of:

- (a) the average price of a preferred or common share on the Brazilian stock exchange on which the highest volume of such shares were traded on the day of withdrawal; or
- (b) if no preferred or common shares were traded on that day, the average price on the Brazilian stock exchange on which the highest volume of preferred or common shares were traded in the 15 trading sessions immediately preceding the date of such withdrawal.

Table of Contents

The U.S. dollar value of the average price of preferred or common shares is determined on the basis of the average of the U.S. dollar/*real* commercial market rates quoted by the Central Bank of Brazil information system on that date (or, if the average price of preferred or common shares is determined under the second option above, price will be determined by the average quoted rates verified on the same 15 preceding trading sessions as described above).

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

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

This summary describes the principal U.S. federal income tax consequences of the ownership and disposition of common or preferred shares or ADSs, based on the U.S. Internal Revenue Code of 1986, as amended (the Code), its legislative history, existing and proposed U.S. Treasury regulations promulgated thereunder, published rulings by the U.S. Internal Revenue Service (IRS), and court decisions, all as in effect as of the date hereof, and all of which are subject to change or differing interpretations, possibly with retroactive effect. This summary does not purport to be a comprehensive description of all of the tax consequences that may be relevant to a decision to hold or dispose of common or preferred shares or ADSs. This summary applies only to purchasers of common or preferred shares or ADSs who hold the common or preferred shares or ADSs as “capital assets” (generally, property held for investment), and does not apply to special classes of holders such as dealers or traders in securities or currencies, holders whose functional currency is not the U.S. dollar, holders of 10% or more of our shares (taking into account shares held directly or through depository arrangements), tax-exempt organizations, partnerships or partners therein, financial institutions, holders liable for the alternative minimum tax, securities traders who elect to account for their investment in common or preferred shares or ADSs on a mark-to-market basis, persons that enter into a constructive sale transaction with respect to common or preferred shares or ADSs, and persons holding common or preferred shares or ADSs in a hedging transaction or as part of a straddle or conversion transaction.

**EACH HOLDER SHOULD CONSULT ITS OWN TAX ADVISOR CONCERNING THE OVERALL TAX CONSEQUENCES IN ITS PARTICULAR CIRCUMSTANCES, INCLUDING THE CONSEQUENCES UNDER LAWS OTHER THAN U.S. FEDERAL INCOME TAX LAWS, OF AN INVESTMENT IN COMMON OR PREFERRED SHARES OR ADSs.**

Shares of our preferred stock will be treated as equity for U.S. federal income tax purposes. In general, a holder of an ADS will be treated as the holder of the shares of common or preferred stock represented by those ADSs for U.S. federal income tax purposes, and no gain or loss will be recognized if you exchange ADSs for the shares of common or preferred stock represented by that ADS.



In this discussion, references to ADSs refer to ADSs with respect to both common and preferred shares, and references to a “U.S. Holder” are to a holder of an ADS that is:

- an individual who is a citizen or resident of the United States;
- a corporation organized under the laws of the United States, any state thereof, or the District of Columbia; or
- otherwise subject to U.S. federal income taxation on a net basis with respect to the shares or the ADS.

### *Taxation of Distributions*

A U.S. Holder will recognize ordinary dividend income for U.S. federal income tax purposes in an amount equal to the amount of any cash and the value of any property we distribute as a dividend to the extent that such distribution is paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes, when such distribution is received by the custodian, or by the U.S. Holder in the case of a holder of common or preferred shares. The amount of any distribution will include distributions characterized as interest on capital and the amount of Brazilian tax withheld on the amount distributed, and the amount of a distribution paid in *reais* will be measured by reference to the exchange rate for converting *reais* into U.S. dollars in effect on the date the distribution is received by the custodian, or by a U.S. Holder in the case of a holder of common or preferred shares. If the custodian, or U.S. Holder in the case of a holder of common or preferred shares, does not convert such *reais* into U.S. dollars on the date it receives them, it is possible that the U.S. Holder will recognize foreign currency loss or gain, which would be U.S. source ordinary loss or gain, when the *reais* are converted into U.S. dollars. Dividends paid by us will not be eligible for the dividends received deduction allowed to corporations under the Code.

Subject to certain exceptions for short-term and hedged positions, the U.S. dollar amount of dividends received by a non-corporate U.S. Holder with respect to the ADSs will generally be subject to taxation at preferential rates if the dividends are “qualified dividends.” Dividends paid on the ADSs will be treated as qualified dividends if (i) the ADSs are readily tradable on an established securities market in the United States and (ii) Petrobras was not, in the year prior to the year in which the dividend was paid, and is not, in the year in which the dividend is paid, a “passive foreign investment company” as defined for U.S. federal income tax purposes (a PFIC). The ADSs are listed on the New York Stock Exchange, and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on our audited financial statements and relevant market and shareholder data, we believe that we should not be treated as a PFIC for U.S. federal income tax purposes with respect to the 2014 or 2015 taxable year. In addition, based on our audited financial statements and our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market and shareholder data, we do not anticipate becoming a PFIC for our 2016 taxable year. Based on existing guidance, it is not clear whether dividends received with respect to the shares will be treated as qualified dividends, because the shares are not themselves listed on a U.S. exchange. In addition, the U.S. Treasury has announced its intention to promulgate rules pursuant to which holders of ADSs and intermediaries through whom such securities are held will be permitted to rely on certifications from issuers to treat dividends as qualified for tax reporting purposes. Because such procedures have not yet been issued, it is not clear whether we would be able to comply with these procedures. U.S. Holders of our ADSs should consult their own tax advisors regarding the availability of the reduced dividend tax rate in the light of their particular circumstances.

Distributions out of earnings and profits with respect to the shares or ADSs generally will be treated as dividend income from sources outside of the United States and generally will be treated as “passive category income” for U.S. foreign tax credit purposes. Subject to certain limitations, Brazilian income tax withheld in connection with any distribution with respect to the shares or ADSs may be claimed as a credit against the U.S. federal income tax liability of a U.S. Holder, or, at the U.S. Holder’s election, such Brazilian withholding tax may be taken as a deduction against taxable income. A U.S. foreign tax credit may not be allowed for Brazilian withholding tax imposed in respect of certain short-term or hedged positions in securities or in respect of arrangements in which a U.S. Holder’s expected economic profit is insubstantial. U.S. Holders should consult their own tax advisors regarding the availability of the U.S. foreign tax credit, including the translation of *reais* into U.S. dollar for these purposes, in light of their particular circumstances.

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

Table of Contents

Holders of shares and ADSs should consult their own tax advisers regarding the availability of the reduced dividend tax rate in the light of the considerations discussed above and their own particular circumstances.

### *Taxation of Capital Gains*

Upon the sale or other disposition of a share or an ADS, a U.S. Holder will generally recognize U.S. source capital gain or loss for U.S. federal income tax purposes, equal to the difference between the amount realized on the disposition and the U.S. Holder's tax basis in such share or ADS. Any gain or loss will be long-term capital gain or loss if the shares or ADSs have been held for more than one year. Non-corporate U.S. Holders of shares or ADSs may be eligible for a preferential rate of U.S. federal income tax in respect of long-term capital gains. Capital losses may be deducted from taxable income, subject to certain limitations. For U.S. federal income tax purposes, such disposition would not result in foreign source-income to a U.S. Holder. As a result, a U.S. Holder may not be able to use the foreign tax credit associated with any Brazilian income taxes imposed on such gains, unless such holder can use the credit against U.S. tax due on other foreign-source income. U.S. Holders should consult their own tax advisers regarding the availability of the U.S. foreign tax credit, including the translation of *reais* into U.S. dollar for purposes of their investment in our shares or ADSs.

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

- such gain is effectively connected with the conduct by the holder of a trade or business in the United States; or
- such holder is an individual who is present in the United States for 183 days or more in the taxable year of the sale and certain other conditions are met.

### *Information Reporting and Backup Withholding*

The payment of dividends on, and proceeds from the sale or other disposition of, the ADSs or common or preferred shares to a U.S. Holder within the United States (or through certain U.S. related financial intermediaries) will generally be subject to information reporting, and may be subject to "backup withholding" unless the U.S. Holder (i) is an exempt recipient, and demonstrates this fact when so required, or (ii) timely provides a taxpayer identification number and certifies that no loss of exemption from backup withholding has occurred and otherwise complies with applicable requirements of the backup withholding rules. Backup withholding is not an additional tax. The amount of any backup withholding collected from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, so long as the required information is properly furnished to the IRS.

U.S. Holders should consult their own tax advisers about any additional reporting requirements that may arise as a result of their purchasing, holding or disposing of our ADSs,

or common or preferred shares.

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

***Taxation Relating to PGF's Notes***

The following summary contains a description of material Brazilian, Dutch, European Union and U.S. federal income tax considerations that may be relevant to the purchase, ownership, and disposition of PGF's debt securities. This summary does not describe any tax consequences arising under the laws of any state, locality or taxing jurisdiction other than the Netherlands, Brazil and the United States.

Table of Contents

This summary is based on the tax laws of the Netherlands, Brazil and the United States as in effect on the date of this annual report, which are subject to change (possibly with retroactive effect). This description is not a comprehensive description of all tax considerations that may be relevant to any particular investor, including tax considerations that arise from rules generally applicable to all taxpayers or to certain classes of investors or that investors are generally assumed to know. Prospective purchasers of notes should consult their own tax advisors regarding the tax consequences of the acquisition, ownership and disposition of the notes.

There is no tax treaty to avoid double taxation between Brazil and the United States. In recent years, the tax authorities of Brazil and the United States have held discussions that may culminate in such a treaty. We cannot predict, however, whether or when a treaty will enter into force or how it will affect the U.S. Holders of notes.

*Dutch Taxation*

The following generally outlines the Dutch tax consequences to holders of the notes in connection with the acquisition, ownership and disposal of notes in a Dutch company. These are subject to changes therein without prejudice to any amendment introduced at a later date and implemented with or without retroactive effect. This section does not purport to describe all possible Dutch tax consequences that may be relevant to a holder in general or a holder who receives or has received any benefits from the notes as employment income, deemed employment income or otherwise as compensation for work or services and should therefore be treated with appropriate caution.

For the purpose of this section, “Dutch Taxes” shall mean taxes of whatever nature levied by or on behalf of the Netherlands or any of its political subdivisions or taxing authorities. The Netherlands means the part of the Kingdom of the Netherlands located in Europe.

For Dutch tax purposes, a holder of notes may include an individual or an entity who does not have the legal title to the notes, but to whom the notes are attributed based either on such individual or entity holding a beneficial interest in the notes or based on specific statutory provisions, including statutory provisions pursuant to which the notes are attributed to an individual who is, or who has directly or indirectly inherited the notes from a person who was, the settlor, grantor or similar originator of a trust, foundation or similar entity that holds the notes.

### *Taxes on Income and Capital Gains*

A holder of notes will not be subject to any Dutch taxes on income or capital gains in respect of the notes, including such tax on any payment under the notes or in respect of any gain realised on the disposal, deemed disposal, redemption or exchange of the notes, provided that:

- such holder is neither a resident nor deemed to be a resident of the Netherlands;
- such holder does not have, and is not deemed to have, an enterprise or an interest in an enterprise that is, in whole or in part, effectively managed in the Netherlands or carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands and to which enterprise or part of an enterprise, as the case may be, the notes are attributable;

Table of Contents

- if such holder is an individual, such income or capital gains do not form "benefits from miscellaneous activities in the Netherlands" (*resultaat uit overige werkzaamheden in Nederland*), which would for instance be the case if the activities in the Netherlands with respect to the notes exceed "normal asset management" (*normaal vermogensbeheer*) or if income and gains are derived from the holding, whether directly or indirectly, of (a combination of) shares, debt claims or other rights (together, a "lucrative interest") that the holder thereof has acquired under such circumstances that such income and gains are intended to be remuneration for work or services performed by such holder (or a related person) in the Netherlands, whether within or outside an employment relation, where such lucrative interest provides the holder thereof, economically speaking, with certain benefits that have a relation to the relevant work or services;
- the holders of the notes do not hold directly or indirectly, a substantial shareholding (i.e., generally speaking, an interest of 5% or more of the shares, options, profit rights, liquidation rights or voting rights) in PGF;
- If such holder is an entity, the holder is not entitled to a share in the profits of an enterprise nor a co-entitlement to the net worth of an enterprise, which is effectively managed in the Netherlands, other than by way of securities, and to which enterprise the notes are attributable; and
- if such holder is an individual, the holder is not entitled to a share in the profits of an enterprise that is effectively managed in the Netherlands, other than by way of securities, and to which enterprise the notes are attributable.

A holder of notes will not be subject to taxation in the Netherlands by reason only of the execution, delivery and/or enforcement of its rights and obligations connected to the notes, the issue of the notes or the performance by PGF of its obligations under the notes.

### *Dutch Withholding Tax*

All payments made under the notes will not be subject to any withholding taxes of whatever nature imposed, levied, withheld or assessed by the Netherlands or any political subdivision or tax authority thereof or therein, provided that such payments qualify as interest on the notes for Dutch tax purposes.

### *Dutch Gift, Estate and Inheritance Taxes*

No gift, estate or inheritance taxes will arise in the Netherlands with respect to an acquisition or deemed acquisition of notes by way of a gift by, or on the death of, a holder of notes who is neither resident, deemed to be resident for Dutch inheritance and gift tax purposes, unless in the case of a gift of notes by an individual who at the date of the gift was neither resident nor deemed to be resident in the Netherlands, such individual dies within 180 days after the date of the gift, while being resident or deemed to be resident in the Netherlands.



For the purposes of Netherlands gift, estate and inheritance tax, a gift that is made under a condition precedent is deemed to be made at the moment such condition precedent is satisfied or, if earlier, the moment the donor dies.

For purposes of Netherlands gift, estate and inheritance tax, an individual who holds the Netherlands nationality will be deemed to be resident in the Netherlands if he has been resident in the Netherlands at any time during the ten years preceding the date of the gift or his death.

For purposes of Netherlands gift tax, an individual not holding the Netherlands nationality will be deemed to be resident in the Netherlands if he has been resident in the Netherlands at any time during the twelve months preceding the date of the gift.

Table of Contents

*Turnover Tax*

No Dutch turnover tax will arise in respect of any payment in consideration for the issue of the notes or with respect to any payment by PGF of principal, interest or premium (if any) on the notes.

*Other Taxes and Duties*

No other Dutch taxes, including taxes of a documentary nature, such as capital tax, stamp or registration tax or duty, are payable in The Netherlands by or on behalf of a holder of the notes by reason only of the purchase, ownership and disposal of the notes.

*European Union Council Directive 2014/107*

Under the EU Council Directive 2014/107, each Member State of the European Union is required to provide to the tax or other relevant authorities of another Member State details of payments of interest (or similar income) paid by a paying agent within its jurisdiction to, or collected by such a paying agent for, an individual beneficial owner resident in that other Member State or to certain limited types of entities established in that other Member State. However, for a transitional period, Austria will (unless during that period it elects otherwise) operate a withholding system in relation to such payments deducting tax at the rate of 35%, unless the beneficial owner of the interest payments elects that certain provisions of information procedures should be applied instead of withholding. The withholding tax levied by Austria during the transitional period may be entirely creditable or refundable in the investor's state of tax residence.

Holders of notes who are in any doubt as to their position should consult their financial or tax advisers.

*Brazilian Taxation*

The following discussion is a summary of the Brazilian tax considerations relating to an investment in the notes by a non-resident of Brazil. The discussion is based on the tax laws of Brazil as in effect on the date hereof and is subject to any change in Brazilian law that may come into effect after such date. The information set forth below is intended to be a general discussion only and does not address all possible consequences relating to an investment in the notes.

**INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISERS AS TO THE CONSEQUENCES OF PURCHASING THE NOTES, INCLUDING, WITHOUT LIMITATION, THE CONSEQUENCES OF THE RECEIPT OF INTEREST AND THE SALE, REDEMPTION OR REPAYMENT OF THE NOTES OR COUPONS.**

Generally, an individual, entity, trust or organization domiciled for tax purposes outside Brazil, or a “Non-resident,” is taxed in Brazil only when income is derived from Brazilian sources or when the transaction giving rise to such earnings involves assets in Brazil. Therefore, any gains or interest (including original issue discount), fees, commissions, expenses and any other income paid by PGF in respect of the notes issued by them in favor of non-resident holders are not subject to Brazilian taxes.

Table of Contents

Interest, fees, commissions, expenses and any other income payable by Petrobras as guarantor resident in Brazil to a Non-resident are generally subject to income tax withheld at source. The rate of withholding income tax in respect of interest payments is generally 15%, unless (i) the holder of the notes is resident or domiciled in a “tax haven jurisdiction” (that is deemed to be a country or jurisdiction which does not impose any tax on income or which imposes such tax at a maximum effective rate lower than 17% or where the local legislation imposes restrictions on disclosing the identities of shareholders, the ownership of investments, or the ultimate beneficiary of earnings distributed to the Non-resident— “tax haven jurisdiction”), in which case the applicable rate is 25% or (ii) such other lower rate as provided for in an applicable tax treaty between Brazil and another country where the beneficiary is domiciled. In case the guarantor is required to assume the obligation to pay the principal amount of the notes, Brazilian tax authorities could attempt to impose withholding income tax at the rate of up to 25% as described above. Although Brazilian legislation does not provide a specific tax rule for such cases and there is no official position from tax authorities or precedents from the Brazilian court regarding the matter, we believe that the remittance of funds by Petrobras as a guarantor for the payment of the principal amount of the notes will not be subject to income tax in Brazil, because the mere fact that the guarantor is making the payment does not convert the nature of the principal due under the notes into income of the beneficiary.

If the payments with respect to the notes are made by Petrobras, as provided for in the guaranties, the Non-resident holders will be indemnified so that, after payment of all applicable Brazilian taxes collectable by withholding, deduction or otherwise, with respect to principal, interest and additional amounts payable with respect to the notes (plus any interest and penalties thereon), a Non-resident holder will receive an amount equal to the amount that such Non-resident holder would have received as if no such Brazilian taxes (plus interest and penalties thereon) were withheld. The Brazilian obligor will, subject to certain exceptions, pay additional amounts in respect of such withholding or deduction so that the Non-resident holder receives the net amount due.

Gains on the sale or other disposition of the notes made outside of Brazil by a Non-resident, other than a branch or a subsidiary of Brazilian resident, to another Non-resident are not subject to Brazilian income tax.

In addition, payments made from Brazil are subject to the tax on foreign exchange transactions (*IOF/Câmbio*), which is levied on the conversion of Brazilian currency into foreign currency and on the conversion of foreign currency into Brazilian currency at a general rate of 0.38%. Other IOF/Câmbio rates may apply to specific transactions. In any case, the Brazilian federal government may increase, at any time, such rate up to 25% but only with respect to future transactions.

Generally, there are no inheritance, gift, succession, stamp, or other similar taxes in Brazil with respect to the ownership, transfer, assignment or any other disposition of the notes by a Non-resident, except for gift and inheritance taxes imposed by some Brazilian states on gifts or bequests by individuals or entities not domiciled or residing in Brazil to individuals or

entities domiciled or residing within such states.

173

---

### *U.S. Federal Income Taxation*

The following summary sets forth certain United States federal income tax considerations that may be relevant to a holder of a note that is, for U.S. federal income purposes, a citizen or resident of the United States or a domestic corporation or that otherwise is subject to U.S. federal income taxation on a net income basis in respect of the notes (a "U.S. Holder"). This summary is based upon the Code, its legislative history, existing and proposed U.S. Treasury regulations promulgated thereunder, published rulings by the IRS, and court decisions, all as in effect as of the date hereof, all of which are subject to change or differing interpretations, possibly with retroactive effect. This summary does not purport to discuss all aspects of the U.S. federal income taxation which may be relevant to special classes of investors, such as financial institutions, insurance companies, dealers or traders in securities or currencies, securities traders who elect to account for their investment in notes on a mark-to-market basis, regulated investment companies, tax-exempt organizations, partnerships or partners therein, holders that are subject to the alternative minimum tax, certain short-term holders of notes, persons that hedge their exposure in the notes or hold notes as part of a position in a "straddle" or as part of a hedging transaction or "conversion transaction" for U.S. federal tax purposes, persons that enter into a "constructive sale" transaction with respect to the notes or U.S. Holder whose functional currency is not the U.S. dollar. U.S. Holders should be aware that the U.S. federal income tax consequences of holding the notes may be materially different for investors described in the prior sentence.

In addition, this summary does not discuss any foreign, state or local tax considerations. This summary only applies to original purchasers of notes who have purchased notes at the original issue price and hold the notes as "capital assets" (generally, property held for investment).

**EACH INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR CONCERNING THE OVERALL TAX CONSEQUENCES IN ITS PARTICULAR CIRCUMSTANCES, INCLUDING THE CONSEQUENCES UNDER LAWS OTHER THAN U.S. FEDERAL INCOME TAX LAWS, OF AN INVESTMENT IN THE NOTES.**

### *Payments of Interest*

Payment of "qualified stated interest," as defined below, on a note (including additional amounts, if any) generally will be taxable to a U.S. holder as ordinary interest income when such interest is accrued or received, in accordance with the U.S. holder's applicable method of accounting for U.S. federal tax purposes. In general, if the "issue price" of a note is less than the "stated redemption price at maturity" by more than *de minimis* amount, such note will be considered to have "original issue discount," or OID. The "issue price" of a note is the first price at which a substantial amount of such notes are sold to investors. The stated redemption price at maturity of a note generally includes all payments other than payments of qualified stated interest.

In general, each U.S. Holder of a note, whether such holder uses the cash or the accrual method of tax accounting, will be required to include in gross income as ordinary interest income the sum of the “daily portions” of OID on the note, if any, for all days during the taxable year that the U.S. Holder owns the note. The daily portions of OID on a note are determined by allocating to each day in any accrual period a ratable portion of the OID allocable to that accrual period. In general, in the case of an initial holder, the amount of OID on a note allocable to each accrual period is determined by (i) multiplying the “adjusted issue price,” as defined below, of the note at the beginning of the accrual period by the yield to maturity of the note, and (ii) subtracting from that product the amount of qualified stated interest allocable to that accrual period. U.S. Holders should be aware that they generally must include OID in gross income as ordinary interest income for U.S. federal income tax purposes as it accrues, in advance of the receipt of cash attributable to that income. The “adjusted issue price” of a note at the beginning of any accrual period will generally be the sum of its issue price (generally including accrued interest, if any) and the amount of OID allocable to all prior accrual periods, reduced by the amount of all payments other than payments of qualified stated interest (if any) made with respect to such note in all prior accrual periods. The term “qualified stated interest” generally means stated interest that is unconditionally payable in cash or property (other than debt instruments of the issuer) at least annually during the entire term of a note at a single fixed rate of interest, or subject to certain conditions, based on one or more interest indices.

Table of Contents

Interest income, including OID, in respect of the notes will constitute foreign source income for U.S. federal income tax purposes and, with certain exceptions, will be treated separately, together with other items of “passive category income,” for purposes of computing the foreign tax credit allowable under the U.S. federal income tax laws. The calculation of foreign tax credits involves the application of complex rules that depend on a U.S. Holder’s particular circumstances. U.S. Holders should consult their own tax advisors regarding the availability of foreign tax credits and the treatment of additional amounts.

*Sale or Disposition of Notes*

A U.S. Holder generally will recognize capital gain or loss upon the sale, exchange, retirement or other disposition of a note in an amount equal to the difference between the amount realized upon such sale, exchange, retirement or other disposition (other than amounts attributable to accrued qualified stated interest, which will be taxed as such) and such U.S. Holder’s adjusted tax basis in the note. A U.S. Holder’s adjusted tax basis in the note generally will equal the U.S. Holder’s cost for the note increased by any amounts included in gross income by such U.S. Holder as OID, if any, and reduced by any payments other than payments of qualified stated interest on that note. Gain or loss realized by a U.S. Holder on the sale, exchange, retirement or other disposition of a note generally will be U.S. source gain or loss for U.S. federal income tax purposes unless it is attributable to an office or other fixed place of business outside the United States and certain other conditions are met. The gain or loss realized by a U.S. Holder will be capital gain or loss, and will be long-term capital gain or loss if the notes were held for more than one year. The net amount of long-term capital gain recognized by an individual holder generally is subject to taxation at preferential rates. Capital losses may be deducted from taxable income, subject to certain limitations.

*Backup Withholding and Information Reporting*

A U.S. Holder may, under certain circumstances, be subject to “backup withholding” with respect to certain payments to that U.S. Holder, unless the holder (i) is an exempt recipient, and demonstrates this fact when so required, or (ii) provides a correct taxpayer identification number, certifies that it is not subject to backup withholding and otherwise complies with applicable requirements of the backup withholding rules. Any amount withheld under these rules generally will be creditable against the U.S. Holder’s U.S. federal income tax liability. While non-U.S. Holders generally are exempt from backup withholding, a non-U.S. Holder may, in certain circumstances, be required to comply with certain information and identification procedures in order to prove entitlement to this exemption.

U.S. Holders should consult their own tax advisors about any additional reporting requirements that may arise as a result of their purchasing, holding or disposing of the notes.

*Non-U.S. Holder*

A holder or beneficial owner of a note that is not a U.S. Holder (a “non-U.S. Holder”) generally will not be subject to U.S. federal income or withholding tax on interest received on the notes.



In addition, a non-U.S. Holder will not be subject to U.S. federal income or withholding tax on gain realized on the sale of notes unless such gain is effectively connected with the conduct by such holder of a trade or business in the United States or, in the case of gain realized by an individual non-U.S. Holder, the non-U.S. Holder is present in the United States for 183 days or more in the taxable year of the sale and certain other conditions are met.

## **Documents on Display**

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, and accordingly file reports and other information with the SEC. Reports and other information filed by us with the SEC may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You can obtain further information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. You may also inspect Petrobras's reports and other information at the offices of the New York Stock Exchange, 11 Wall Street, New York, New York 10005, on which Petrobras's ADSs are listed. Our SEC filings are also available to the public from the SEC's Web site at <http://www.sec.gov>. For further information about obtaining copies of Petrobras's public filings at the New York Stock Exchange, call (212) 656-5060.

We also file financial statements and other periodic reports with the CVM.

## **Item 11. Qualitative and Quantitative Disclosures about Market Risk**

### *Risk Management*

We are exposed to a number of risks arising from our operations. Such risks include the possibility that changes in prices of oil and oil products, foreign currency exchange rates or interest rates adversely affect the value of our financial assets, liabilities, future cash flows and earnings, and increase our liquidity risks. Such liquidity risks are represented by the possibility of a shortage of cash or other financial assets in order to settle our obligations on agreed dates.

We are also exposed to the credit risk of customers and financial institutions, arising from our business operations and cash management. Such risks involve the possibility of not receiving compensation for sales made and for amounts invested, deposited or guaranteed by financial institutions.

We adopt the practice of integrated risk management. Risks are considered in every decision making process and we manage them on an integrated manner. This way, we do not focus on the individual risks of operations or business units, but, rather, we take a wider view of our consolidated activities, capturing possible natural hedges where available.

In order to further improve our risk management governance practices, our board of directors has established an organizational structure for risk management composed by (i) an Executive Manager for Corporate Risks, who is under the supervision of our Chief Governance, Risk and Compliance Officer, and (ii) units for risk management within each Petrobras business area. Petrobras's Executive Manager for Corporate Risks is responsible for:

- identifying, monitoring and reporting periodically to our board of executive officers and board of directors the effect of major risks to our integrated results;

- encouraging integration and capture the synergy of risk management actions taken in the organizational units, as well as in other business processes, support and management;
- establishing a corporate methodology for risk management guided by an integrated and systemic view, which allows for a continuous monitoring environment of risks in various hierarchical levels;
- disseminating knowledge in risk management; and
- supporting managers to develop and implement the necessary measures to ensure alignment of Petrobras's exposure to acceptable risk levels.

Table of Contents

In June 2015, our board of directors approved a revised Corporate Risks Management Policy, which specifies authorities, responsibilities, the five principles and 10 guidelines that should guide our initiatives related to risk management. Our current Corporate Risks Management Policy is fully adherent to worldwide recognized methodological references such as COSO-ERM (Committee of Sponsoring Organizations of the Treadway Commission – Enterprise Risk Management Integrated Framework) and ISO 31000. Also, they meet the guidelines provided by the Guide for Corporate Risks Management issued by the Brazilian Institute of Corporate Governance – IBGC.

This policy has a more comprehensive approach to corporate risk management, which combines the traditional economic and financial risk management approach with other relevant areas of interest, such as protection of life, health and environment, assets and business information protection (property security) and combating fraud and corruption (legal compliance), among other corporate risks. Aimed at integrating these risk management actions, this policy allows any employee to have access to the terms and concepts common to the subject as well as to the measures taken and parties responsible for the management of each of the 21 corporate risks we are exposed to. These corporate risks are classified into five categories: strategic, financial, compliance, business and operational. For further information regarding our revised Corporate Risks Management Policy, please visit our website at <http://www.investidorpetrobras.com.br/en/corporate-governance/governance-instruments/petrobras-l>

### *Commodity Price Risk*

We operate in an integrated manner throughout the various stages of the oil industry. A great part of our results relates directly to oil exploration and production, refining and to the sale of natural gas, biofuels and electricity in Brazil. As our purchases and sales of crude oil and oil products are related to international commodity prices, we are exposed to their price fluctuations, which may influence our profitability, our cash flow from operations and our financial situation.

For the purposes of managing our exposure to price fluctuations, we avoid, whenever possible and reasonable, the use of derivatives for hedging systemic operations (namely, buying and selling oil and oil products in order to provide for the operational needs of our system).

The existing derivatives transactions are intended to protect the expected results of the transactions carried out abroad. Our derivatives contracts provide economic hedges for anticipated crude oil and oil products purchases and sales in the international markets, generally expected to occur within a 30- to 360-day period. See Note 33 to our audited consolidated financial statements for more information about our commodity derivatives transactions, including a sensitivity analysis demonstrating the net change in fair value of a 25% (or 50%) adverse change in the price of the underlying commodity for options and futures.



Table of Contents*Interest Rate and Exchange Rate Risk*

The table below provides summary information regarding our exposure to interest rate and exchange rate risk in our total debt portfolio for 2015 and 2014, including short-term and long-term debt.

	<b>Total Debt Portfolio(1)</b>	
	<b>2015</b>	<b>2014</b>
	(%)	
<b>Real-denominated:</b>		
Fixed rate	2.8	4.0
Floating rate	13.5	13.8
Sub-total	16.3	17.8
<b>U.S.dollar-denominated:</b>		
Fixed rate	38.5	36.6
Floating rate	35.6	35.3
Sub-total	74.1	71.9
<b>Other currencies:</b>		
Fixed rate	9.2	9.8
Floating rate	0.4	0.5
Sub-total	9.6	10.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
<b>Floating rate debt:</b>		
<i>Real</i> -denominated	13.5	13.8
Foreign currency-denominated	36.0	35.8
<b>Fixed rate debt:</b>		
<i>Real</i> -denominated	2.8	4.0
Foreign currency denominated	47.7	46.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>
U.S. dollars	74.1	71.9
Euro	6.9	7.4
GBP	2.1	2.1
Japanese Yen	0.6	0.8
Brazilian <i>reais</i>	16.3	17.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

(1) Short term and long term.

In general, our foreign currency floating rate debt is principally subject to fluctuations in LIBOR. Our floating rate debt denominated in *reais* is principally subject to fluctuations in the

*Taxa de Juros de Longo Prazo* (Brazilian long-term interest rate, or TJLP), as fixed by the CMN.

We generally do not utilize derivative instruments to manage our exposure to interest rate fluctuation. However, we continuously consider various forms of derivatives to reduce our exposure to interest rate fluctuations and may utilize these financial instruments in the future.

The exchange rate risk to which we are exposed has greater impact on the balance sheet and derives principally from the incidence of non-*real* denominated obligations in our debt portfolio. With respect to the management of foreign exchange risks, we seek to identify them and treat them in an integrated analysis of natural protections (hedges), benefiting from the correlation between our income and expenses. For the short term, the management of our foreign exchange risk involves allocating our cash investments between the Brazilian *real* and other foreign currencies. Our strategy may also involve the use of derivative financial instruments to protect against foreign exchange rate volatility, which may impact the value of some of our obligations.

We have designated cash flow hedging relationships to manage the exchange rate risk on our highly probable future exports. See Item 5. “Operating and Financial Review and Prospects—Inflation and Exchange Rate Variation” and Notes 4.3.6 and 33.2(a) to our audited consolidated financial statements for further information about our cash flow hedge.

See Note 33 to our audited consolidated financial statements for more information about our interest rate and exchange rate risks, including a sensitivity analysis demonstrating the potential impact of a 25% (or 50%) adverse change in the underlying variables as of December 31, 2015.

For further information regarding expected maturity schedule and currency, the principal and interest cash flows, related average interest rates of our debt obligations, credit risk and liquidity risk, see Notes 17 and 33.6 to our audited consolidated financial statements.

## **Item 12. Description of Securities other than Equity Securities**

### *American Depositary Shares*

The Bank of New York Mellon is the Depositary for both of our common and preferred ADSs. In its capacity as Depositary, The Bank of New York Mellon will register and deliver the ADSs, each of which represents (i) two shares (or a right to receive two shares) deposited with the principal São Paulo office of Itaú Unibanco S.A., as custodian for the Depositary, and (ii) any other securities, cash or other property which may be held by the Depositary. The Depositary’s corporate trust office at which the ADSs will be administered is located at 101 Barclay Street, 22 West, New York, New York 10286.

### *Fees Payable by holders of our ADSs*

ADS holders are required to pay various fees to the Depositary, and the Depositary may refuse to provide any service for which a fee is assessed until the applicable fee has been paid.

ADS holders are required to pay the Depositary: (i) an annual fee of US\$0.02 (or less) per ADS for administering the ADR program, and (ii) amounts in respect of expenses incurred by the Depositary or its agents on behalf of ADS holders, including expenses arising from compliance with applicable law, taxes or other governmental charges, facsimile transmission, or conversion of foreign currency into U.S. dollars. In both cases, the depositary may decide in its sole discretion to seek payment by directly billing investors, by deducting the applicable amount from cash distributions or by charging the book-entry system accounts of ADS holders or their representatives. ADS holders may also be required to pay additional fees for certain services provided by the depositary, as set forth in the table below.



**Depository service**

Issuance and delivery of ADSs, including issuances resulting from a distribution of shares or rights or other property  
 Distribution of dividends

**Fee payable by ADS holders**

US\$5.00 per 100 ADSs (or portion thereof)  
 US\$0.02 (or less) per ADS per year  
 US\$5.00 per 100 ADSs (or portion thereof)

Cancellation of ADSs for the purpose of withdrawal

*Fees Payable by the Depository to Petrobras*

The Depository reimburses us for certain expenses we incur in connection with the administration and maintenance of the ADR program. These reimbursable expenses comprise investor relations expenses, listing fees, legal fees and other expenses related to the administration and maintenance of the ADR program. In addition, the Depository has agreed to provide us with an additional reimbursement per annum equal to 80% of the dividend fee collected by the Depository. For the year ended December 31, 2015, the gross aggregate amount of such reimbursements was approximately US\$15 million.

## **PART II**

### **Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

### **Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

### **Item 15. Controls and Procedures**

We have identified material weaknesses in our internal control over financial reporting, which we describe in the “Management Report on Internal Control over Financial Reporting” below. In 2015, we took significant measures to remediate these material weaknesses, as described in “Remediation” below.

Our management has analyzed these material weaknesses, made all necessary adjustments in our consolidated financial statements, and concluded that our consolidated financial statements fairly present, in all material respects, our financial condition, results of operations and cash flows at and for the periods presented, and the impact of all facts known to our management to date has been reflected in the consolidated financial statements.

### **Disclosure Controls and Procedures**

We have evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of December 31, 2015. Based upon our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as a result of the material weaknesses in our internal control over financial reporting described below, as of December 31, 2015 our disclosure controls and procedures were not effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

### **Management Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting.

Our internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and our Chief Financial Officer, and effected by our board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS, as issued by the IASB.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management has determined the effectiveness of our internal control over financial reporting as of December 31, 2015, based on the criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on such assessment and criteria, and due to the material weaknesses described below, our management has concluded that our internal control over financial reporting was not effective as of December 31, 2015.

### **Material Weaknesses in Internal Control over Financial Reporting**

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

During our management's assessment of internal control over financial reporting as of December 31, 2015, it identified the material weaknesses described below.

#### **Management Override of Controls**

As reported in our 2014 Annual Report on Form 20-F, our management identified certain decisions taken during the period between 2004 and April 2012, specifically relating to our large investment projects in the Exploration and Production, Refining, and Gas and Power business segments, that did not comply with our existing internal controls over the process of contracting services in these segments. The internal controls over contracting of services include procedures such as the Petrobras Contracting Manual (*Manual da Petrobras de Contratação*) and the Investment Projects Corporate Procedures (*Sistemática Corporativa de Projetos de Investimento*).

In some of our contracting processes, one or more senior managers, together with third parties (namely, certain suppliers involved in construction projects), colluded to eliminate, infringe upon, override or circumvent these controls, which resulted in the commission of wrongful acts contrary to our interests and policies. Our management identified the following internal control deficiencies related to the failure to detect these acts that together constitute a material weakness in our control environment: (i) inadequate “tone at the top” regarding internal controls; (ii) failure to communicate the ethical values prescribed in our Code of Conduct; and (iii) lack of an effective whistleblower program.

These deficiencies had no impact in 2015, but they contributed to a failure of our internal control over financial reporting to prevent an overstatement of property, plant and equipment in 2014.

#### **Controls related to Property, Plant and Equipment**

As reported in our 2014 Annual Report on Form 20-F, our management identified material weakness regarding Property, Plant and Equipment as follows:

- Deficiencies related to monitoring the need to reclassify certain property, plant and equipment from assets under construction to completed property, plant and equipment. A failure to make that reclassification when the circumstances warrant it could lead to a failure to account timely for the depreciation associated with the project.

- Deficiencies related to identifying possible risks arising from the economic and financial condition of contractors and suppliers in light of project postponements and from guarantees that had not yet been fully performed, which resulted in a failure to identify the need to write down payments advanced to contractors and suppliers that would not result in future economic benefits; and deficiencies related to identifying the need to recognize expenses related to the termination of these contracts.

Table of Contents

These deficiencies resulted in a failure of our internal control over financial reporting to detect an overstatement of property, plant and equipment and an understatement of our expenses in both 2014 and 2015.

In 2015, our management identified a deficiency related to the review of changes in certain groupings of exploration and production assets as cash generating units (CGUs) and their compliance with IFRS. We determined that we did not sufficiently review whether certain initially proposed groupings met the definition of a CGU. We also determined that we did not sufficiently review exploration and production asset groupings in light of identified changes in circumstances that affected the way they generate cash flows. As a result, it was necessary to modify certain groups of assets identified as CGUs as of December 31, 2015.

This deficiency resulted in a failure of our internal control over financial reporting to detect an overstatement of property, plant and equipment and an understatement of our expenses in 2015.

***Review and Approval of Manual Journal Entries***

As reported in our 2014 Annual Report on Form 20-F, our management identified a failure to timely monitor possible changes in the control parameters of the enterprise resource planning (“ERP”) environment, which are used to support the internal controls related to the review and approval of manual journal entries. This failure to timely monitor ERP parameter changes could subject us to the risk of non-detection of the totality of manual journal entries to be reviewed or confirmed. Our management also identified deficiencies in the design of our internal control over review and approval of manual journal entries.

This deficiency had no financial reporting impact in 2014 or 2015.

***System Access Management and Segregation of Duties in Business and Information Technology Processes***

As reported in our 2014 Annual Report on Form 20-F, our management identified deficiencies in control operations related to granting access procedures and segregation of duties analysis at the business process level that, when evaluated in the aggregate, constituted a material weakness.

The identified control deficiencies relating to the management, review and monitoring of access showed exceptions, mainly deficiencies in the operation of controls related to the implementation of specific rules regarding access revision. As for the management of access to critical ERP functions and segregation of duties in the ERP business processes, deficiencies in operating controls occurred.

This deficiency had no financial reporting impact in 2014 or 2015.

***Provisions and Contingent Liabilities for Legal Proceedings***

In 2015, our management identified design deficiencies related to controls for capturing and registering in our internal monitoring systems the legal proceedings to which we are party .

Additionally, a deficiency was identified relating to the completeness of legal contingencies and accuracy of the classification of the possibility of an outflow of resources for each contingency as probable, possible or remote. In specific cases, the control's operations did not accurately classify the possibility of an outflow of resources for certain contingencies as possible, probable or remote.

This deficiency resulted in a failure of our internal control over financial reporting to detect an understatement of liabilities and an understatement of expenses in 2015.

### ***Calculation of Company's Actuarial Liabilities***

We found that there were deficiencies in the process of generating data used to calculate our actuarial liability with respect to our health care plan (AMS) and pension plan (Petros). These deficiencies relate to the completeness of participants and accuracy of their individual information in the databases generated for the actuarial calculation.

These deficiencies resulted in a failure of our internal control over financial reporting to detect an overstatement of liabilities and an understatement of comprehensive income in 2015.

### ***Potential Impact of Material Weaknesses***

These material weaknesses could result in a misstatement of the account balances or disclosures representing material misstatements in our annual or interim consolidated financial statements that would not be prevented or detected.

### ***Audit of the Effectiveness of Internal Control over Financial Reporting***

Our independent registered public accounting firm, PricewaterhouseCoopers Auditores Independentes – PwC, has audited the effectiveness of our internal control over financial reporting, as stated in their report as of December 31, 2015, which is included herein.

### ***Remediation***

Our management has been actively engaged in the design and implementation of remediation efforts to address the identified material weaknesses, as well as other identified areas of risk. The remediation efforts outlined below, which have been implemented or are in the process of implementation, are intended to address both the identified material weaknesses and related areas. The design and implementation of these and other remedial efforts are the responsibility of our management.

### ***Management Override of Controls***

In 2015, as a response to the material weakness reported in our 2014 Annual Report on Form 20-F, our management adopted corrective measures and initiatives to strengthen the control environment, which are currently in progress.

These actions demonstrate our management's effort to improve corporate governance, including the establishment of a model for sharing decisions within our management. In addition, our management took further measures aimed at establishing a structure of successive controls in the various stages of the decision-making process, as well as continuing to spread a culture of commitment to ethics and to further the excellence of internal controls.

These corrective measures are convergent and they leverage our senior management's communication regarding ethical values, management and internal controls, and also



disseminating them throughout Petrobras. The progress of the action plan is being monitored by the Governance, Risk and Compliance Officer and by the Audit Committee.

To continue the stabilization and development of the improvement actions, our management is continuing in 2016 to work on the broad implementation of the proposed actions for the proper development of our internal controls. We implemented a number of initiatives to strengthen our internal controls, including:

I – Strengthening corporate governance:

183

---

Table of Contents

1. Adding new members to the Board of Directors.
2. Modifying the Bylaws to create new committees and to permit the participation of members external to the Board of Directors.
3. Enhancing the focus of the Governance, Risk and Compliance committee on procedural compliance, mitigating the risks in our activities, and on compliance with laws, standards and regulations, including the rules of the Brazilian Securities Commission (CVM) and the U.S. Securities and Exchange Commission (SEC).
4. Reviewing standards and procedures for the management of investment projects and contracting of goods and services.

II - Communicating the values expressed in the Code of Ethics and in the Conduct Guide:

We have continued a broad cooperative effort, under the leadership of our senior management, to communicate ethical values regularly through our internal communications, review the rules that support these values, and increase our training actions, mainly with regard to the Code of Ethics, the Conduct Guide and the Petrobras Program for Corruption Prevention for new and existing employees.

III – Strengthening Petrobras’s Program for Corruption Prevention:

We have continued to monitor the activities of the Petrobras Program for Corruption Prevention, which was implemented in order to ensure legal and procedural compliance and to mitigate risks in our activities, with an emphasis on the following initiatives: (a) creation of the Correction Committee; (b) improvement of the performance of internal investigation commissions; (c) review and adjustment of our internal regulations; (d) inclusion of "compliance competency" as part of our employees' performance and results review (*Gerenciamento de Desempenho e Resultados*); (e) creation of compliance agents; (f) increase in the dissemination to employees of the Guide for Gifts, Presents and Hospitality (*Guia de Brindes, Presentes e Hospitalidade*); and (g) implementation of an Integrity Due Diligence procedure (*Due Diligence de Integridade*), based on which suppliers of goods and services must provide detailed information on their structure, financing and compliance mechanisms to be included in Petrobras's suppliers list.

IV – Improving the whistleblowing channel:

Our management made changes to our whistleblowing channel, which is overseen by the Ombudsman office, to promote the effectiveness of this process, mainly by strengthening protections for the confidentiality of the whistleblower, the secrecy and the integrity of any information provided and the traceability of reported and confirmed information, in addition to following up on and responding to all complaints and recording all results. The changes implemented include: (a) engaging an external, specialized and independent whistleblowing channel; and (b) appointing a General Ombudsman through a process carried out by an

executive recruitment firm, as a step toward restructuring the whistleblowing channel.

## V – Pursuing investigative actions:

In 2015, we began ongoing investigative actions in relation to allegations of wrongful acts committed by employees and former employees of Petrobras, using Internal Investigative Commissions, in addition to the investigations conducted by independent law firms reporting to a committee of our board of directors. The factual results have been shared with the Brazilian public prosecutor's office and the authorities of the countries where facts related to the investigations took place. We note that during 2015 (a) the investigations carried out by independent law firms continued; (b) we have maintained a special committee, which is composed of three members with notable expertise, two of whom are independent of Petrobras, and the third of whom is the Chief Governance, Risk and Compliance Officer who acts as a link between the investigation and the Board of Directors; (c) we continued our preliminary blacklist of companies allegedly involved in irregularities; and (d) we put additional effort to recover damages suffered as a result of the wrongful acts contrary to our interests and policies referred to above.

## VI – Creating the Corporate Risk Management Policy:

Our corporate risk management policy was approved on June 26, 2015 and sets out guidelines for corporate risk management at Petrobras. We have identified 21 categories of corporate risk, and have appointed managers responsible for deploying this policy through rules and procedures for each specific risk.

Our management's assessment for 2015 indicates that, although a number of measures were taken to minimize the risks related to the override of these controls, these actions need to achieve further maturity levels to be effective.

**Property, plant and equipment**

In an effort to remediate the material weakness related to property, plant and equipment reported in 2014, we took the following steps in 2015:

- In 2014, our management identified a deficiency related to the failure to recognize impairment losses in five exploration and production projects that were in their initial planning phase, for which we did not have estimated future cash flows. In 2015, we improved the procedures and internal controls over completeness and accuracy of recognition of impairment losses and widely disseminated these improvements to employees involved in the impairment calculation process. Based upon the measures we have adopted to remedy the deficiency reported in 2014 and the results of our tests of their effectiveness, we have concluded that this deficiency was remediated as of December 31, 2015.
- We developed a series of improvements to mitigate the risks of failure to transfer projects from assets under construction to operating assets and failure to timely write off projects. Those improvements consist in implementing: (i) systemic of validation of records and information flow; (ii) new guidelines aimed at expediting the recognition of the need to

write off projects and the treatment given to canceled or postponed projects; and (iii) new procedures for the control of expenditures related to assets under construction. Despite the significant reinforcement of monitoring of project costs in 2015, we believe that these actions need to develop further, and we concluded that these deficiencies were not entirely remediated in 2015.

Table of Contents

- We improved the procedures and controls related to advances granted to suppliers and the early termination of contracts with possible additional termination costs and extensive dissemination of the applicable accounting concepts with respect to these procedures in order to mitigate the related deficiencies detected in 2014. Despite the significant measures we took in 2015 to remediate the deficiency related to advances granted to suppliers, we concluded these actions were not sufficient and need to achieve further maturity levels in order to entirely remediate this deficiency. With respect to the measures we took in 2015 to remediate the deficiency related to early termination of contracts, our management determined that the internal controls related to this issue would be able to capture and timely recognize these events during the year. However, despite progress, additional testing of these controls is needed in order to conclude that the related deficiencies have been remediated.

In response to the remaining deficiencies as of December 31, 2015, we are implementing corrective measures in relation to our property, plant and equipment controls, including:

- Improving internal controls and procedures so that changes in circumstances that result in alterations to identified exploration and production cash generating units are timely recognized, reviewed with respect to compliance with the applicable accounting standards and approved by the competent authorities of management.
- Improving controls in order to prevent and detect the untimely transfer of assets under construction to completed property, plant and equipment;
- Strengthening our controls over the regular and timely offset of advances to suppliers; and
- Strengthening our controls over payments related to contracts, such as advances granted to suppliers and costs related to early termination contracts.

### ***Review and Approval of Manual Journal Entries***

In response to the material weakness identified in 2014, we implemented a monthly system to monitor possible changes in the control parameters of the ERP environment in order to eliminate any possibility of the recurrence of risks related to the control of manual journal entries identified in the previous year. In addition, we have automated the process of review manual journal entries in the ERP environment, through the monthly review by managers of the manual journal entries, thus meeting the timing required for the confirmation of the criteria integrating the control's design.

In 2015, our management identified operating inconsistencies while testing the effectiveness of our manual journal entries control. In response, we are improving training for our managers responsible for reviewing manual journal entries, in order to eliminate any possibility that inconsistencies in such processes will materialize.

***System Access Management and Segregation of Duties in Business and Information Technology Processes***

A number of actions were undertaken in 2015 to remediate the control deficiencies. Improvements were made to the governance model, management procedures and specific tools in the ERP environment.

Table of Contents

Our management believes that there has been progress in the remediation of the deficiencies identified in 2014, which are at different stages of stabilization and development level. The remediation actions include:

- Contracting consulting services to improve the management of segregation of duties and critical access restriction.
- Improving the quality of the review by those responsible for monitoring the risk of conflicts of segregation of duties and critical access restriction, through training, workshops and alignment meetings.
- Enhancing the design of critical access restriction and segregation of duties controls.
- Enforcing quarterly monitoring of conflicts segregation of duties events.
- Implementing a new system of approval for access grants and annual revalidation, with peer cross-validation for senior management and preventing self-granting and self-revalidation, including those users acting as delegates.
- Improving the ERP profile manager system, mainly as relating to the approval of access requests and the automation of access revocations.

Our management believes that there is still a need for improvement of control design over system access, segregation of duties and critical access management in Information Technology and specific business processes and that there were control operation failures in granting, revoking and reviewing accesses.

Our management remains committed to the continuous improvement of these controls, by implementing the following actions in 2016:

- With respect to the operation of critical access and segregation of duties controls, our management has been undertaking activities with the managers responsible for each business process.
- Regarding design deficiencies over system access controls in business processes, our management will review them as to design, scope and frequency, so that any existing residual risks are being covered.
- Regarding access management, our management continues to improve automated rules, already initiated in 2015, aiming to increase the control operation effectiveness.
- Our management will continue implementing improvements in compensating controls related to segregation of duties in our transactional environments and increasing the number of automated monitoring controls.



- Our management is committed to continuously review internal processes and projects in order to improve the internal control system and to be aligned with global best practices, including, if necessary, hiring external consultancy.

### ***Provisions and Contingent Liabilities for Legal Proceedings***

In response to the material weakness related to legal and judicial proceedings, our management remains committed to the continuous improvement of these controls, by implementing the following actions:

- We (i) contracted a specialized company to gather and consolidate information from databases of the Brazilian courts and official publications (Diários Oficiais), which we reconciled with our internal records, and (ii) reconciled the databases relating to tax contingencies. These measures ensured both that those contingencies are registered in our internal monitoring systems for the best estimate of the outflow of resources required to settle them and that our records are complete with respect to legal and judicial proceedings. No instances of unregistered contingencies were identified.

Table of Contents

- We expanded the scope of our periodic review process for such classification, increasing the frequency (from quarterly to monthly) and reducing the threshold of materiality for proceedings to be reviewed. Additionally, we have established a committee to review monthly any changes in significant cases.
- In 2016, our management will maintain the actions already implemented in 2015 in order to sufficiently develop, stabilize and achieve maturity levels.
- Our management will reinforce and review its procedures and controls, including using the results of an extensive market research carried out in 2015 on practices with respect to control and accounting for legal proceedings.

These measures aim to ensure the completeness of our legal proceedings records and disclosures and that any change in the possibility of an outflow of resources is reflected in a timely manner.

### **Calculation of Company's Actuarial Liabilities**

In response to the material weakness related to the calculation of the actuarial liabilities, our management is implementing the following corrective measures:

- Prior to the generation of databases to carry out the actuarial calculation, analytical reviews will be reinforced and the concept and criteria of the information requested for the actuarial calculation will be carefully clarified.
- We will be generating an interim database of individual and comparative analytical review by criteria.
- In order to prevent any improper changes to the database used for the calculation of the actuarial liability, we will reinforce our analysis to safeguard the proper use of the applicable data fields in accordance with the original database.

### **Changes in Internal Control Over Financial Reporting**

Changes in our internal control over financial reporting that occurred during fiscal 2015, which have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting are described above under "Remediation."

### **Item 16A. Audit Committee Financial Expert**

On June 17, 2005, our board of directors approved the appointment of an Audit Committee for purposes of the Sarbanes-Oxley Act of 2002. Mr. Walter Mendes de Oliveira Filho and Mr. Jerônimo Antunes are our Audit Committee financial experts and both are independent, as defined in 17 CFR 240.10A-3.

**Item 16B. Code of Ethics**

Our business and our relations with third parties are guided by ethical principles. In 1998, our board of executive officers approved the Petrobras Code of Ethics, which was extended to all Petrobras subsidiaries, and which in 2002 was renamed to Code of Ethics for the Petrobras Group.

In 2006, after undergoing a revision process with wide participation from our business segments, employees and subsidiaries, the current version of the Code of Ethics was approved by the board of executive officers and the board of directors. The Code of Ethics is applicable to our workforce, executive officers and board of directors. It is available on our website at

<http://www.investidorpetrobras.com.br/en/corporate-governance/governance-instruments/code-ethics>

Table of Contents

Our executive officers further developed our ethics management through the creation of the Petrobras Ethics Commission in 2008 which has since become responsible for promoting corporate compliance with ethical principles, as well as acting as a forum for discussion of subjects related to ethics.

In connection with our compliance programs, in July 2013, our board of executive officers approved our Corruption Prevention Program (*Programa Petrobras de Prevenção da Corrupção* - PPC), which is focused on the prevention, detection and penalization of acts of fraud and corruption committed against Petrobras. The program is managed across areas of Petrobras, and is designed to improve our governance structure and operational accountability and to foster our commitment to good governance. This program is currently managed by our Governance, Risk and Compliance Department. A copy of our Corruption Prevention Program Manual is available on our website at <http://www.investidorpetrobras.com.br/en/corporate-governance/governance-instruments/petrobras->

In November 2014, our board of executive officers also approved Petrobras's Conduct Guide, which contains the guidelines to implement the Code of Ethics for the Petrobras Group (Code of Ethics) and other internal regulations. Petrobras's Conduct Guide establishes the basic rules for ethical behavior and professional conduct to be adopted within Petrobras. A copy of our Conduct Guide is available on our website at <http://www.investidorpetrobras.com.br/en/corporate-governance/governance-instruments/petrobras->  
In February 2015, Petrobras's procurement guidelines were amended to subject all of Petrobras's suppliers and service providers to Petrobras's Conduct Guide.

## **Item 16C. Principal Accountant Fees and Services**

### **Audit and Non-Audit Fees**

The following table sets forth the fees billed to us by our independent auditors, PricewaterhouseCoopers Auditores Independentes, during the fiscal years ended December 31, 2015 and December 31, 2014:

	<b>Year Ended December</b>	
	<b>31,</b>	
	<b>2015</b>	<b>2014</b>
	<b>(US\$ thousand)</b>	
Audit fees	17,444	9,418
Audit-related fees	2,553	154
Tax fees	348	328
<b>Total fees</b>	<b>20,345</b>	<b>9,900</b>

Audit fees in the above table are the fees billed by PricewaterhouseCoopers Auditores Independentes in connection with the audit of our annual financial statements (IFRS and Brazilian GAAP), interim reviews (IFRS and Brazilian GAAP), audits of our subsidiaries (IFRS

and Brazilian GAAP, among others) and review of periodic documents filed with the SEC. In 2015 and 2014, audit fees included fees billed by PricewaterhouseCoopers Auditores Independentes, in the amount of US\$2,792 thousand and US\$636 thousand respectively, related to the audit of internal controls. "Audit-related fees" in the above table are the fees billed by PricewaterhouseCoopers Auditores Independentes for assurance and related services that are reasonably related to the performance of the audit or reviews of our financial statements and are not reported under "audit fees."

Tax fees in the table above are fees billed by PricewaterhouseCoopers Auditores Independentes for services related to tax compliance reviews conducted in connection with the audit procedures on the financial statements for the years 2015 and 2014.

## **Audit Committee Approval Policies and Procedures**

Our Audit Committee has the authority to recommend pre-approval policies and procedures to our board of directors for the engagement of our independent auditor's services. At present, our board of directors has decided not to establish such pre-approval policies and procedures. Our board of directors expressly approves on a case-by-case basis any engagement of our independent auditors for all services provided to our subsidiaries or to us. Our bylaws prohibit our independent auditor from providing any consulting services to our subsidiaries or to us during the term of such auditor's contract.

## **Item 16D. Exemptions from the Listing Standards for Audit Committees**

Under the listed company audit committee rules of the NYSE and the SEC, we must comply with Exchange Act Rule 10A-3, which requires that we establish an audit committee, composed of members of the board of directors, that meets specified requirements. In reliance on the exemption in Rule 10A-3(b)(iv)(E), we have designated one member to our Audit Committee, Jerônimo Antunes, who is a designee of the Brazilian federal government, which is our controlling shareholder and therefore one of our affiliates. In our assessment, Mr. Antunes acts independently in performing the responsibilities of an audit committee member under the Sarbanes-Oxley Act and satisfies the other requirements of Exchange Act Rule 10A-3.

## **Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

During the fiscal year ended December 31, 2015, neither any "affiliated purchaser," as defined in Rule 10b-18(a)(3) under the Securities Exchange Act, nor we have purchased any of our equity securities.

## **Item 16F. Change in Registrant's Certifying Accountant**

Not applicable.

## **Item 16G. Corporate Governance**

### **Comparison of Petrobras's Corporate Governance Practices with NYSE Corporate Governance Requirements Applicable to U.S. Companies**

Under the rules of the New York Stock Exchange, foreign private issuers are subject to a more limited set of corporate governance requirements than U.S. domestic issuers. As a foreign private issuer, we must comply with four principal NYSE corporate governance rules: (i) we must satisfy the requirements of Exchange Act Rule 10A-3; (ii) our Chief Executive Officer must promptly notify the NYSE in writing after any executive officer becomes aware of any material non-compliance with the applicable NYSE corporate governance rules; (iii) we must provide the NYSE with annual and interim written affirmations as required under the NYSE corporate governance rules; and (iv) we must provide a brief description of any significant

differences between our corporate governance practices and those followed by U.S. companies under NYSE listing standards.

Table of Contents

The table below briefly describes the significant differences between our corporate governance practices and the NYSE corporate governance rules.

Section	New York Stock Exchange Corporate Governance Rules for U.S. Domestic Issuers	Petrobras's Practices
303A.01	Listed companies must have a majority of independent directors.  "Controlled companies" are not required to comply with this requirement.	Petrobras is a controlled company because more than a majority of its voting power is controlled by the Brazilian federal government. As a controlled company, Petrobras would not be required to comply with the majority of independent directors requirement if it were a U.S. domestic issuer. There is no legal provision or policy that requires us to have independent directors.
303A.03	The non-management directors of each listed company must meet at regularly scheduled executive sessions without management.	With the exception of the CEO of the company (who is also a director), all of Petrobras's directors are non-management directors. The internal regulation of Petrobras's board of directors provides for the occurrence of an executive session without the presence of the CEO if a particular matter may represent a conflict of interests.
303A.04	Listed companies must have a nominating/corporate governance committee composed entirely of independent directors, with a written charter that covers certain minimum specified duties.  "Controlled companies" are not required to comply with this requirement.	Petrobras does not have a nominating committee. Petrobras also does not have a corporate governance committee composed of directors.  Petrobras's board of directors develops, evaluates and approves corporate governance principles. As a controlled company, Petrobras would not be required to comply with the nominating/corporate governance committee requirement if it were a U.S. domestic issuer.
303A.05	Listed companies must have a compensation committee composed entirely of independent directors, with a written charter that covers certain	Petrobras has a committee that advises the board of directors with respect to compensation and management succession. There is no legal provision or policy that requires the members



minimum specified duties. of this committee to be independent.

“Controlled companies” are not required to comply with this requirement. As a controlled company, Petrobras would not be required to comply with the compensation committee requirement if it were a U.S. domestic issuer.

### **Audit Committee**

303A.06  
303A.07

Listed companies must have an audit committee with a minimum of three independent directors that satisfy the independence requirements of Rule 10A-3 under the Exchange Act, with a written charter that covers certain minimum specified duties. Petrobras’s Audit Committee is a statutory advisory committee to the board of directors and is composed of members that satisfy the independence requirements set forth in Rule 10A-3 under the Exchange Act. The Audit Committee has a written charter that sets forth its responsibilities that include, among other things: (i) strengthening ties with the external auditors, permitting closer supervision of their work and of issues regarding their competency and independence, (ii) assuring legal and regulatory compliance, including with respect to internal controls, compliance procedures and ethics, and (iii) monitoring the financial position of the company, especially as to risks, internal auditing work and financial disclosure.

### **Equity Compensation Plans**

303A.08

Shareholders must have the opportunity to vote for compensation plans through shares and material reviews, with limited exceptions as set forth by the NYSE’s rules. Under the Brazilian Corporate Law, shareholder approval is required for the adoption and revision of any equity compensation plans. Petrobras does not currently have any equity compensation plans.

Table of Contents

The table below briefly describes the significant differences between our corporate governance practices and the NYSE corporate governance rules.

Section	New York Stock Exchange Corporate Governance Rules for U.S. Domestic Issuers	Petrobras's Practices
303A.09	<p><b>Corporate Governance Guidelines</b></p> <p>Listed companies must adopt and disclose corporate governance guidelines.</p>	<p>Petrobras has a set of Corporate Governance Guidelines (<i>Diretrizes de Governança Corporativa</i>) that address director qualification standards, responsibilities, compensation, orientation, self-appraisals and access to information by the management. The guidelines do not reflect the independence requirements set forth in Sections 303A.01 and 303A.02 of the NYSE rules. Certain portions of the guidelines, including the responsibilities and compensation sections, are not discussed with the same level of detail set forth in the commentaries to the NYSE rules. The guidelines are available on Petrobras's website.</p>
303A.10	<p><b>Code of Ethics for Directors, Officers and Employees</b></p> <p>Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers.</p>	<p>Petrobras has a Code of Ethics (<i>Código de Ética</i>) and a Conduct Guide (<i>Guia de Conduta</i>), applicable to its directors, executive officers, senior management, employees, interns and service providers within the Petrobras group, and a Code of Good Practices (<i>Código de Boas Práticas</i>) applicable to its directors, executive officers and senior management. No waivers of the provisions of the Code of Ethics, Conduct Guide or Code of Good Practices are permitted. These documents are available on Petrobras's website.</p>

**Certification Requirements**

303A.12

Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the company of NYSE corporate governance listing standards. Our CEO will promptly notify the NYSE in writing if any executive officer becomes aware of any material noncompliance with any applicable provisions of the NYSE corporate governance rules.

192

---

**PART III****Item 17. Financial Statements**

Not applicable.

**Item 18. Financial Statements**

See pages F-2 through F-102, incorporated herein by reference.

**Item 19. Exhibits**

<b><u>No.</u></b>	<b><u>Description</u></b>
<u>1.1</u>	<u>Amended Bylaws of Petróleo Brasileiro S.A.-Petrobras, dated as of July 1, 2015</u>
2.1	Amended and Restated Deposit Agreement, dated as of January 3, 2012, among Petrobras, The Bank of New York Mellon, as depositary, and registered holders and beneficial owners from time to time of the ADSs, representing the common shares of Petrobras, and Form of ADR evidencing ADSs representing the common shares of Petrobras (incorporated by reference to Exhibit 2.1 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
2.2	Amended and Restated Deposit Agreement, dated as of January 3, 2012, among Petrobras, The Bank of New York Mellon, as depositary, and registered holders and beneficial owners from time to time of the ADSs, representing the preferred shares of Petrobras, and Form of ADR evidencing ADSs representing the preferred shares of Petrobras (incorporated by reference to Exhibit 2.2 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
2.3	Indenture, dated as of July 19, 2002, between Petrobras International Finance Company and JPMorgan Chase Bank, as Trustee (incorporated by reference to Exhibit 4.5 of the Registration Statement of Petrobras International Finance Company and Petrobras on Form F-3, filed with the Securities and Exchange Commission on July 5, 2002, and amendments to which were filed on July 19, 2002 and August 14, 2002 (File Nos. 333-92044 and 333-92044-01)).
2.4	Indenture, dated as of December 15, 2006, between Petrobras International Finance Company and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.9 to the Registration Statement of Petrobras and Petrobras International Finance Company on Form F-3, filed with the Securities and Exchange Commission on December 18, 2006 (File Nos. 333-139459 and 333-139459-01)).
2.5	Amended and Restated Second Supplemental Indenture, initially dated as of February 11, 2009, as amended and restated as of July 9, 2009, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as

- Trustee, relating to the 7.875% Global Notes due 2019 (incorporated by reference to Exhibit 2.33 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.6 Amended and Restated Guaranty for the 7.875% Global Notes due 2019, initially dated as of February 11, 2009, as amended and restated as of July 9, 2009, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.34 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.7 Third Supplemental Indenture, dated as of October 30, 2009, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 5.75% Global Notes due 2020 (incorporated by reference to Exhibit 2.35 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.8 Fourth Supplemental Indenture, dated as of October 30, 2009, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 6.875% Global Notes due 2040 (incorporated by reference to Exhibit 2.36 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.9 Guaranty for the 5.75% Global Notes due 2020, dated as of October 30, 2009, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.37 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).

Table of Contents

- 2.10 Guaranty for the 6.875% Global Notes due 2040, dated as of October 30, 2009, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.38 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.11 Amended and Restated First Supplemental Indenture, initially dated as of November 1, 2007, as amended and restated as of January 11, 2008, as amended and restated as of March 31, 2010, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 5.875% Global Notes due 2018 (incorporated by reference to Exhibit 2.15 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.12 Amended and Restated Fifth Supplemental Indenture, initially dated as of October 6, 2006, as amended and restated as of February 7, 2007, as amended and restated as of March 31, 2010, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon (as successor to JPMorgan Chase Bank), as Trustee, relating to the 6.125% Global Notes due 2016 (incorporated by reference to Exhibit 2.14 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 20, 2010 (File Nos. 001-15106 and 001-33121)).
- 2.13 Eighth Supplemental Indenture, dated as of December 9, 2011, among Petrobras International Finance Company, Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as Principal Paying Agent and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg Paying Agent, relating to the 4.875% Global Notes due 2018 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on December 9, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.14 Ninth Supplemental Indenture, dated as of December 9, 2011, among Petrobras International Finance Company, Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as Principal Paying Agent and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg Paying Agent, relating to the 5.875% Global Notes due 2022 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on December 9, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.15 Guaranty for the 4.875% Global Notes due 2018, dated as of December 9, 2011, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on December 9, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.16 Guaranty for the 5.875% Global Notes due 2022, dated as of December 9, 2011, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras and Petrobras International Finance

- Company, furnished to the Securities and Exchange Commission on December 9, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.17 Tenth Supplemental Indenture, dated as of December 12, 2011, among Petrobras International Finance Company, Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as Principal Paying Agent and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg Paying Agent, relating to the 6.250% Global Notes due 2026 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on December 12, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.18 Guaranty for the 6.250% Global Notes due 2026, dated as of December 12, 2011, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on December 12, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.19 Amended and Restated Sixth Supplemental Indenture, dated as of February 6, 2012, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 5.375% Global Notes due 2021 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.20 Amended and Restated Seventh Supplemental Indenture, dated as of February 6, 2012, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 6.750% Global Notes due 2041 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.21 Twelfth Supplemental Indenture, dated as of February 6, 2012, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee, relating to the 3.500% Global Notes due 2017 (incorporated by reference to Exhibit 4.11 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.22 Amended and Restated Guaranty for the 5.375% Global Notes due 2021, dated as of February 6, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).

Table of Contents

- 2.23 Amended and Restated Guaranty for the 6.750% Global Notes due 2041, dated as of February 6, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.24 Guaranty for the 3.500% Global Notes due 2017, dated as of February 6, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.10 to Form 6-K of Petrobras and Petrobras International Finance Company, furnished to the Securities and Exchange Commission on February 6, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.25 Sixth Supplemental Indenture, dated as of February 10, 2012, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.11 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.26 Thirteenth Supplemental Indenture, dated as of February 10, 2012, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.60 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.27 Amended and Restated Guaranty for the 6.125% Global Notes due 2016, dated as of February 10, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.31 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.28 Amended and Restated Guaranty for the 8.375% Global Notes due 2018, dated as of February 10, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.16 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.29 Amended and Restated Guaranty for the 5.875% Global Notes due 2018, dated as of February 10, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 2.33 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on April 2, 2012 (File Nos. 001-15106 and 001-33121)).
- 2.30 Amended and Restated Third Supplemental Indenture, initially dated as of December 10, 2003, as amended and restated as of March 31, 2010, and as further amended and restated as of March 25, 2013, among Petrobras International Finance Company, Petrobras and The Bank of New York Mellon (as successor to JPMorgan Chase Bank), as Trustee, relating to the 8.375% Global Notes due 2018 (incorporated by reference to Exhibit 2.41 to the Annual Report on Form 20-F of Petrobras, filed with the Securities and Exchange Commission on April 29, 2013 (File No. 001-15106)).



- 2.31 Indenture, dated as of August 29, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.3 to the Registration Statement of Petrobras, Petrobras International Finance Company and Petrobras Global Finance B.V. on Form F-3, filed with the Securities and Exchange Commission on August 29, 2012 (File Nos. 333-183618, 333-183618-01 and 333-183618-02))
- 2.32 Indenture, dated as of August 29, 2012, between Petrobras Global Finance B.V. and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.5 to the Registration Statement on Form F-3 of Petrobras, Petrobras International Finance Company and Petrobras Global Finance B.V., filed with the Securities and Exchange Commission on August 29, 2012 (File Nos. 333-183618, 333-183618-01 and 333-183618-02))
- 2.33 First Supplemental Indenture, dated as of October 1, 2012, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 3.25% Global Notes due 2019 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).
- 2.34 Second Supplemental Indenture, dated as of October 1, 2012, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 4.25% Global Notes due 2023 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).
- 2.35 Third Supplemental Indenture, dated as of October 1, 2012, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 5.375% Global Notes due 2029 (incorporated by reference to Exhibit 4.8 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).

Table of Contents

- 2.36 Guaranty for the 3.25% Global Notes due 2019, dated as of October 1, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).
- 2.37 Guaranty for the 4.25% Global Notes due 2023, dated as of October 1, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).
- 2.38 Guaranty for the 5.375% Global Notes due 2029, dated as of October 1, 2012, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.7 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on October 1, 2012 (File No. 001-15106)).
- 2.39 Fourth Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 2.000% Global Notes due 2016 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.40 Fifth Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 3.000% Global Notes due 2019 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.41 Sixth Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 4.375% Global Notes due 2023 (incorporated by reference to Exhibit 4.8 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.42 Seventh Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 5.625% Global Notes due 2043 (incorporated by reference to Exhibit 4.11 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.43 Eighth Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the Floating Rate Global Notes due 2016 (incorporated by reference to Exhibit 4.14 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.44 Ninth Supplemental Indenture, dated as of May 20, 2013, between Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the Floating Rate Global Notes due 2019 (incorporated by reference to Exhibit 4.17 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.45 Guaranty for the 2.000% Global Notes due 2016, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange

- Commission on May 20, 2013(File No. 001-15106)).
- 2.46 Guaranty for the 3.000% Global Notes due 2019, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.47 Guaranty for the 4.375% Global Notes due 2023, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.7 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.48 Guaranty for the 5.625% Global Notes due 2043, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.10 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.49 Guaranty for the Floating Rate Global Notes due 2016, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.13 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.50 Guaranty for the Floating Rate Global Notes due 2019, dated as of May 20, 2013, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.16 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on May 20, 2013(File No. 001-15106)).
- 2.51 Tenth Supplemental Indenture, dated as of January 14, 2014, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 2.750% Global Notes due 2018 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.52 Eleventh Supplemental Indenture, dated as of January 14, 2014, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 3.750% Global Notes due 2021 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).

Table of Contents

- 2.53 Twelfth Supplemental Indenture, dated as of January 14, 2014, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 4.750% Global Notes due 2025 (incorporated by reference to Exhibit 4.8 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.54 Thirteenth Supplemental Indenture, dated as of January 14, 2014, among Petrobras Global Finance B.V., Petrobras, The Bank of New York Mellon, as Trustee, The Bank of New York Mellon, London Branch, as principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, relating to the 6.625% Global Notes due 2034 (incorporated by reference to Exhibit 4.11 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.55 Guaranty for the 2.750% Global Notes due 2018, dated as of January 14, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.56 Guaranty for the 3.750% Global Notes due 2021, dated as of January 14, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.57 Guaranty for the 4.750% Global Notes due 2025, dated as of January 14, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.7 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.58 Guaranty for the 6.625% Global Notes due 2034, dated as of January 14, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.10 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 14, 2014 (File No. 001-15106)).
- 2.59 Fourteenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 3.250% Global Notes due 2017 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.60 Fifteenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 4.875% Global Notes due 2020 (incorporated by reference to Exhibit 4.5 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.61 Sixteenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 6.250% Global Notes due 2024 (incorporated by reference to Exhibit 4.8 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).

- 2.62 Seventeenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 7.250% Global Notes due 2044 (incorporated by reference to Exhibit 4.11 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.63 Eighteenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the Floating Rate Global Notes due 2017 (incorporated by reference to Exhibit 4.14 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.64 Nineteenth Supplemental Indenture, dated as of March 17, 2014, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the Floating Rate Global Notes due 2020 (incorporated by reference to Exhibit 4.17 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.65 Guaranty for the 3.250% Global Notes due 2017, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.66 Guaranty for the 4.875% Global Notes due 2020, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.4 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.67 Guaranty for the 6.250% Global Notes due 2024, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.7 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.68 Guaranty for the 7.250% Global Notes due 2044, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.10 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.69 Guaranty for the Floating Rate Global Notes due 2017, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.13 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).

Table of Contents

- 2.70 Guaranty for the Floating Rate Global Notes due 2020, dated as of March 17, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.16 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on March 17, 2014 (File No. 001-15106)).
- 2.71 Twentieth Supplemental Indenture, dated as of June 5, 2015, among Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee, relating to the 6.850% Global Notes due 2115 (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on June 5, 2015 (File No. 001-15106)).
- 2.72 Guaranty for the 6.850% Global Notes due 2115, dated as of June 5, 2015, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on June 5, 2015 (File No. 001-15106)).
- 2.73 Seventh Supplemental Indenture, dated as of December 28, 2014, among Petrobras International Finance Company S.A., Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.1 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 15, 2015 (File No. 001-15106)).
- 2.74 Fourteenth Supplemental Indenture, dated as of December 28, 2014, among Petrobras International Finance Company S.A., Petrobras Global Finance B.V., Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.2 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 15, 2015 (File No. 001-15106)).
- 2.75 First Amendment to the Guaranties, dated as of December 28, 2014, between Petrobras and The Bank of New York Mellon, as Trustee (incorporated by reference to Exhibit 4.3 to Form 6-K of Petrobras, furnished to the Securities and Exchange Commission on January 15, 2015 (File No. 001-15106)).
- 2.76 Assignment Agreement, dated as of September 3, 2010, among Petrobras, the Brazilian federal government and the National Petroleum, Natural Gas and Biofuels Agency (incorporated by reference to Exhibit 2.47 to the Annual Report on Form 20-F of Petrobras and Petrobras International Finance Company, filed with the Securities and Exchange Commission on May 26, 2011 (File Nos. 001-15106 and 001-33121)).
- 2.77 Production Sharing Agreement, dated as of December 2, 2013, among Petrobras, Shell Brasil Petróleo Ltda., Total E&P do Brasil Ltda., CNODC Brasil Petróleo e Gás Ltda. and CNOOC Petroleum Brasil Ltda., the Brazilian federal government, Pré-Sal Petróleo S.A. - PPSA and the National Petroleum, Natural Gas and Biofuels Agency (incorporated by reference to the Annual Report on Form 20-F of Petrobras, filed with the Securities and Exchange Commission on April 30, 2014 (File No. 001-15106)).

The amount of long-term debt securities of Petrobras authorized under any given instrument does not exceed 10% of its total assets on a consolidated basis. Petrobras hereby agrees to furnish to the SEC, upon its request, a copy of any instrument defining the rights of holders of its long-term debt or of its subsidiaries

for which consolidated or unconsolidated financial statements are required to be filed.

- 4.1 Form of Concession Agreement for Exploration, Development and Production of crude oil and natural gas executed between Petrobras and the ANP (incorporated by reference to Exhibit 10.1 of Petrobras's Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 14, 2000 (File No. 333-12298)).
- 4.2 Purchase and Sale Agreement of natural gas, executed between Petrobras and Yacimientos Petroliferos Fiscales Bolivianos-YPFB (together with and English version) (incorporated by reference to Exhibit 10.2 to Petrobras's Registration Statement on Form F-1 filed with the Securities and Exchange Commission on July 14, 2000 (File No. 333-12298)).
- 8.1 List of subsidiaries.
- 12.1 Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 13.1 Certifications Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 15.1 Consent letter of PwC.
- 15.2 Consent letter of DeGolyer and MacNaughton.
- 99.1 Third Party Reports of DeGolyer and MacNaughton.

Table of Contents

**SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant hereby certifies that it meets all the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rio de Janeiro, on April 27, 2016.

Petróleo Brasileiro S.A.—PETROBRAS

By:

/s/ Aldemir Bendine

Name:

Aldemir Bendine

Title:

Chief Executive Officer

By:

/s/ Ivan de Souza Monteiro

Name:

Ivan de Souza Monteiro

Title:

Chief Financial Officer and Chief  
Investor Relations Officer



**Petróleo Brasileiro S.A. – Petrobras**

Consolidated financial statements as of  
December 31, 2015, 2014 and 2013 with report of independent registered public accounting  
firm

---

**Petróleo Brasileiro S.A. – Petrobras**

Index

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<u>Report of Independent Registered Public Accounting Firm</u>	<u>F-3</u>
<u>Consolidated Statement of Financial Position</u>	<u>F-4</u>
<u>Consolidated Statement of Income</u>	<u>F-5</u>
<u>Consolidated Statement of Comprehensive Income</u>	<u>F-6</u>
<u>Consolidated Statement of Cash Flows</u>	<u>F-7</u>
<u>Consolidated Statement of Changes in Shareholders’ Equity</u>	<u>F-8</u>
<u>Notes to the financial statements</u>	<u>F-9</u>
<u>1. The Company and its operations</u>	<u>F-9</u>
<u>2. Basis of preparation</u>	<u>F-9</u>
<u>3. The “Lava Jato (Car Wash) Operation” and its effects on the Company</u>	<u>F-10</u>
<u>4. Summary of significant accounting policies</u>	<u>F-15</u>
<u>5. Critical accounting policies: key estimates and judgments</u>	<u>F-25</u>
<u>6. New standards and interpretations</u>	<u>F-31</u>
<u>7. Cash and cash equivalents and Marketable securities</u>	<u>F-32</u>
<u>8. Trade and other receivables</u>	<u>F-33</u>
<u>9. Inventories</u>	<u>F-36</u>
<u>10. Disposal of assets and legal mergers</u>	<u>F-36</u>
<u>11. Investments</u>	<u>F-38</u>
<u>12. Property, plant and equipment</u>	<u>F-41</u>
<u>13. Intangible assets</u>	<u>F-43</u>
<u>14. Impairment</u>	<u>F-44</u>
<u>15. Exploration for and evaluation of oil and gas reserves</u>	<u>F-49</u>
<u>16. Trade payables</u>	<u>F-51</u>
<u>17. Finance debt</u>	<u>F-51</u>
<u>18. Leases</u>	<u>F-53</u>
<u>19. Related party transactions</u>	<u>F-54</u>
<u>20. Provision for decommissioning costs</u>	<u>F-56</u>
<u>21. Taxes</u>	<u>F-56</u>
<u>22. Employee benefits (Post-Employment)</u>	<u>F-61</u>
<u>23. Shareholders’ equity</u>	<u>F-70</u>

<u>24. Sales revenues</u>	<u>F-71</u>
<u>25. Other expenses, net</u>	<u>F-72</u>
<u>26. Costs and Expenses by nature</u>	<u>F-72</u>
<u>27. Net finance income (expense)</u>	<u>F-73</u>
<u>28. Supplemental information on statement of cash flows</u>	<u>F-73</u>
<u>29. Segment Information</u>	<u>F-74</u>
<u>30. Provisions for legal proceedings</u>	<u>F-78</u>
<u>31. Commitment to purchase natural gas</u>	<u>F-84</u>
<u>32. Collateral for crude oil exploration concession agreements</u>	<u>F-84</u>
<u>33. Risk management</u>	<u>F-85</u>
<u>34. Fair value of financial assets and liabilities</u>	<u>F-91</u>
<u>35. Subsequent events</u>	<u>F-92</u>
<u>36. Information Related to Guaranteed Securities Issued by Subsidiaries</u>	<u>F-93</u>
<u>Supplementary information on Oil and Gas Exploration and Production (unaudited)</u>	<u>F-94</u>

---

## **Petróleo Brasileiro S.A. – Petrobras**

Report of Independent Registered Public Accounting Firm

### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Petróleo Brasileiro S.A. – Petrobras

In our opinion, the accompanying consolidated statement of financial position and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows present fairly, in all material respects, the financial position of Petróleo Brasileiro S.A. - Petrobras and its subsidiaries (the "Company") at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control - Integrated Framework* (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) because the following material weaknesses in internal control over financial reporting existed as of that date:

- inadequate "tone at the top" regarding internal controls, failure to communicate the ethical values prescribed in the Company's Code of Conduct, and lack of an effective whistleblower program;
- deficiencies related to monitoring the need to reclassify certain property, plant and equipment from assets under construction to completed property, plant and equipment;
- failure to identify the need to write down payments advanced to contractors and suppliers that will not result in future economic benefits and failure to identify the need to recognize expenses related to the termination of these contracts;
- deficiencies related to the review of changes in certain groupings of exploration and production assets as cash generating units (CGUs), their compliance with International Financial Reporting Standards, and changes in circumstances that affected the way certain CGUs generate cash;
- failure to timely monitor possible changes in the control parameters of the enterprise

- resource planning (“ERP”) environment, which are used to support the internal controls related to the review and approval of manual journal entries, and deficiencies in the design of the internal control over review and approval of manual journal entries;
- deficiencies in control operations related to granting access procedures and segregation of duties analysis at the business process level;
  - deficiencies related to controls for capturing and registering in the Company’s internal monitoring systems the legal proceedings to which the Company is party, the completeness of legal contingencies and accuracy of the classification of the possibility of an outflow of resources for each contingency as probable, possible or remote ; and
  - deficiencies related to the completeness of participants and accuracy of their individual information in the data generated for the actuarial calculation.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses referred to above are described in Management Report on Internal Control over Financial Reporting appearing under Item 15 in the Company’s 2015 Form 20-F. We considered these material weaknesses in determining the nature, timing, and extent of audit tests applied in our audit of the 2015 consolidated financial statements, and our opinion regarding the effectiveness of the Company’s internal control over financial reporting does not affect our opinion on those consolidated financial statements. The Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in management’s report referred to above. Our responsibility is to express opinions on these financial statements and on the Company’s internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 3 to the financial statements, the Company, in 2014, wrote off US\$ 2,527 million of overpayments on the acquisition of property plant and equipment incorrectly capitalized according to testimony obtained from Brazilian criminal investigations.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of

financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Rio de Janeiro, April 27, 2016.

/s/ PricewaterhouseCoopers Auditores Independentes

PricewaterhouseCoopers Auditores Independentes

F-3

---

**Petróleo Brasileiro S.A. – Petrobras**

Consolidated Statement of Financial Position

December 31, 2015 and 2014

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Assets</b>	<b>Note</b>	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>Liabilities</b>	<b>Note</b>	<b>12.31.2015</b>	<b>12.31.2014</b>
---------------	-------------	-------------------	-------------------	--------------------	-------------	-------------------	-------------------

**Current  
assets**

**Current  
liabilities**



Cash and cash equivalents	7	25,058	16,655	Trade payables	16	6,380	9,760
---------------------------	---	--------	--------	----------------	----	-------	-------

Marketable securities	7	780	9,323	Finance debt	17	14,683	11,868
-----------------------	---	-----	-------	--------------	----	--------	--------

Trade and other receivables, net	8	5,803	7,969	Finance lease obligations	18	12	16
----------------------------------	---	-------	-------	---------------------------	----	----	----

Inventories	9	7,441	11,466	Income taxes payable	21.1	105	247
-------------	---	-------	--------	----------------------	------	-----	-----

Recoverable	21.1	983	1,063	Other taxes	21.1	3,365	4,064
income taxes				payable			

Other recoverable taxes	21.1	1,765	2,748	Payroll, profit sharing and related charges	1,302	2,066
-------------------------	------	-------	-------	---	-------	-------

Advances to suppliers	108	423	Pension and medical benefits	22	655	796
-----------------------	-----	-----	------------------------------	----	-----	-----

Other current assets	1,338	1,180	Others	1,946	2,301
----------------------	-------	-------	--------	-------	-------



43,276	50,827	28,448	31,118
--------	--------	--------	--------



Assets classified as held for sale	10.3	152	5	Liabilities on assets classified as held for sale	10.3	125	—
--	------	-----	---	---	------	-----	---

43,428

50,832

28,573

31,118





**Non-current  
assets**

**Non-current  
liabilities**

Long-term  
receivables

Finance debt	17	111,482	120,218
--------------	----	---------	---------



Trade and other receivables, net	8	3,669	4,832	Finance lease obligations	18	39	56
----------------------------------	---	-------	-------	---------------------------	----	----	----

Marketable securities	7	88	109	Deferred income taxes	21.6	232	3,031
-----------------------	---	----	-----	-----------------------	------	-----	-------

Judicial deposits	30.2	2,499	2,682	Pension and medical benefits	22	12,195	16,491
-------------------	------	-------	-------	------------------------------	----	--------	--------

Deferred income taxes	21.6	6,016	1,006	Provisions for legal proceedings	30.1	2,247	1,540
-----------------------	------	-------	-------	----------------------------------	------	-------	-------

Other tax assets	21.1	2,821	4,008	Provision for decommissioning costs	20	9,150	8,267
------------------	------	-------	-------	-------------------------------------	----	-------	-------

Advances to suppliers	1,638	2,409	Others	548	988
-----------------------	-------	-------	--------	-----	-----

Others	2,446	3,817	135,893	150,591
--------	-------	-------	---------	---------





19,177      18,863

Total liabilities	164,466	181,709
-------------------	---------	---------





Shareholders'  
equity



Investments	11	3,527	5,753	Share capital (net 23.1 of share issuance costs)	107,101	107,101
-------------	----	-------	-------	--	---------	---------

Property, plant and equipment	12	161,297	218,730	Change in interest in subsidiaries	23.2	321	148
-------------------------------------	----	---------	---------	--	------	-----	-----



Intangible assets	13	3,092	4,509	Profit reserves	23.3	57,977	66,423
----------------------	----	-------	-------	-----------------	------	--------	--------

187,093	247,855	Accumulated other comprehensive (deficit)	23.4	(100,163)	(57,400)
---------	---------	--	------	-----------	----------



Attributable to the shareholders of Petrobras	65,236	116,272
---	--------	---------

Non-controlling interests	11.4	819	706
------------------------------	------	-----	-----











Total equity	66,055	116,978
--------------	--------	---------

Total assets	230,521	298,687	Total liabilities and shareholder's equity	230,521	298,687
--------------	---------	---------	--	---------	---------



The Notes form an integral part of these Financial Statements.



F-4

---

**Petróleo Brasileiro S.A. – Petrobras**

## Consolidated Statement of Income

*December 31, 2015, 2014 and 2013 (In millions of US Dollars, unless otherwise indicated)*

	<b>Note</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Sales revenues	24	97,314	143,657	141,462
Cost of sales		(67,485)	(109,477)	(108,834)
Gross profit		29,829	34,180	32,628
Income (expenses)				
Selling expenses		(4,627)	(6,827)	(4,904)
General and administrative expenses		(3,351)	(4,756)	(4,982)
Exploration costs	15	(1,911)	(3,058)	(2,959)
Research and development expenses		(630)	(1,099)	(1,132)
Other taxes		(2,796)	(760)	(780)
Impairment of assets	14	(12,299)	(16,823)	(544)
Write-off - overpayments incorrectly capitalized	3	–	(2,527)	–
Other expenses, net	25	(5,345)	(5,293)	(1,113)
		(30,959)	(41,143)	(16,414)
Income (loss) before finance income (expense), share of earnings in equity-accounted investments, profit sharing and income taxes		(1,130)	(6,963)	16,214
Finance income		1,412	1,949	1,815
Finance expenses		(6,437)	(3,923)	(2,673)
Foreign exchange and inflation indexation charges		(3,416)	339	(1,933)
Net finance income (expense)	27	(8,441)	(1,635)	(2,791)
Share of earnings (losses) in equity-accounted investments	11.2	(177)	218	507
Profit sharing	22.7	–	(444)	(520)
Income (loss) before income taxes		(9,748)	(8,824)	13,410
Income taxes	21.7	1,137	1,321	(2,578)
Net income (loss)		(8,611)	(7,503)	10,832
Net income (loss) attributable to:				
Shareholders of Petrobras		(8,450)	(7,367)	11,094
Non-controlling interests		(161)	(136)	(262)
Net income (loss)		(8,611)	(7,503)	10,832
Basic and diluted earnings (loss) per weighted-average of common and preferred share - in U.S. dollars	23.6	(0.65)	(0.56)	0.85



The Notes form an integral part of these Financial Statements.

F-5

---

**Petróleo Brasileiro S.A. – Petrobras**

## Consolidated Statement of Comprehensive Income

December 31, 2015, 2014 and 2013 (In millions of US Dollars)

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Net income (loss)	(8,611)	(7,503)	10,832
<b>Items that will not be reclassified to the statement of income:</b>			
Actuarial gains (losses) on defined benefit pension plans	(53)	(5,947)	7,248
Deferred income tax	(14)	1,157	(2,153)
	(67)	(4,790)	5,095
<b>Items that may be reclassified subsequently to the statement of income:</b>			
Unrealized gains / (losses) on available-for-sale securities			
Recognized in shareholders' equity	–	–	1
Reclassified to the statement of income	–	–	(44)
Deferred income tax	–	–	15
	–	–	(28)
Unrealized gains / (losses) on cash flow hedge - highly probable future exports			
Recognized in shareholders' equity	(21,132)	(6,443)	(6,226)
Reclassified to the statement of income	2,057	702	303
Deferred income tax	6,486	1,953	2,012
	(12,589)	(3,788)	(3,911)
Unrealized gains / (losses) on cash flow hedge - others			
Recognized in shareholders' equity	10	6	9
Reclassified to the statement of income	–	1	9
	10	7	18
Cumulative translation adjustments (*)	(29,248)	(15,606)	(20,397)
Share of other comprehensive income (losses) in equity-accounted investments	(861)	(263)	(265)
Total other comprehensive income (loss):	(42,755)	(24,440)	(19,488)
Total comprehensive income (loss)	(51,366)	(31,943)	(8,656)
Comprehensive income (loss) attributable to:			
Shareholders of Petrobras	(51,209)	(31,729)	(8,263)
Non-controlling interests	(157)	(214)	(393)
Total comprehensive income (loss)	(51,366)	(31,943)	(8,656)
(*) Includes US\$ 1,002 of cumulative translation adjustments in investees (US\$ 321 in 2014).			

The Notes form an integral part of these Financial Statements.

F-6

---

**Petróleo Brasileiro S.A. – Petrobras**

## Consolidated Statement of Cash Flows

*December 31, 2015, 2014 and 2013 (In millions of US Dollars)*

<b>Cash flows from Operating activities</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Net income (loss)	(8,611)	(7,503)	10,832
Adjustments for:			
Share of earnings (losses) in equity-accounted investments	177	(218)	(507)
Depreciation, depletion and amortization	11,591	13,023	13,188
Impairment of property, plant and equipment, intangible and other assets	12,299	16,823	544
Inventory write-down to net realizable value	431	1,015	580
Exploration expenditures written off	1,441	2,178	1,892
Write-off - overpayments incorrectly capitalized	–	2,527	–
Allowance for impairment of trade receivables	941	2,378	73
(Gains) losses on disposal of assets, write-offs of assets, E&P areas returned and cancelled projects, net	758	481	(1,745)
Foreign exchange, indexation and finance charges	9,172	3,571	3,167
Deferred income taxes, net	(2,043)	(3,045)	402
Pension and medical benefits (actuarial expense)	1,960	2,022	2,566
Decrease (Increase) in assets			
Trade and other receivables, net	(396)	(2,507)	(1,142)
Inventories	291	570	(2,128)
Judicial deposits	(789)	(506)	(131)
Other assets	(819)	(2,297)	(172)
Increase (Decrease) in liabilities			
Trade payables	(1,226)	(1,211)	1,108
Taxes payable	1,061	(1,245)	(1,517)
Pension and medical benefits	(709)	(834)	(796)
Other liabilities	384	1,410	75
Net cash provided by operating activities	25,913	26,632	26,289

**Cash flows from Investing activities**

Capital expenditures	(21,653)	(34,808)	(45,110)
Investments in investees	(108)	(329)	(199)
Proceeds from disposal of assets	727	3,744	3,820
Divestment (investment) in marketable securities	7,982	(5,469)	5,718
Dividends received	259	387	146
Net cash (used in) investing activities	(12,793)	(36,475)	(35,625)

**Cash flows from Financing activities**

(Acquisition) Investments of non-controlling interest	100	(98)	(70)
Financing and loans, net:			
Proceeds from long-term financing	17,420	31,050	39,542
Repayment of principal	(14,809)	(10,031)	(18,455)
Repayment of interest	(6,305)	(5,995)	(5,066)
Dividends paid	–	(3,918)	(2,656)
Net cash provided by (used in) financing activities	(3,594)	11,008	13,295
Effect of exchange rate changes on cash and cash equivalents	(1,123)	(378)	(1,611)
Net increase in cash and cash equivalents	8,403	787	2,348
Cash and cash equivalents at the beginning of the year	16,655	15,868	13,520
Cash and cash equivalents at the end of the year	25,058	16,655	15,868

The Notes form an integral part of these Financial Statements.

**Petróleo Brasileiro S.A. – Petrobras**

## Consolidated Statement of Changes in Shareholders' Equity

December 31, 2015, 2014 and 2013 (In millions of US Dollars)

	Share capital (net of share issuance costs)			Accumulated other comprehensive income (deficit) and deemed cost			
	Share Capital	Share issuance costs	Change in interest in subsidiaries	Cumulative translation adjustment	Cash flow hedge - highly probable future exports	Actuarial gains (losses) on defined benefit pension plans	Other comprehensive income (loss) and deemed cost
Balance at December 31, 2012	107,362	(279)	628	(6,174)	—	(7,600)	102
Capital increase with reserves	9						
Realization of deemed cost							(5)
Change in interest in subsidiaries			46				
Net income							
Other comprehensive income (loss)				(20,266)	(3,911)	5,095	(275)
Appropriations:							
Transfer to reserves							
Dividends							
	107,371	(279)	674	(26,440)	(3,911)	(2,505)	(178)
Balance at December 31, 2013		107,092	674				(33,034)
Capital increase with reserves	9						
Realization of deemed cost							(4)

Change in interest in subsidiaries			(526)				
Net loss							
Other comprehensive income (loss)				(15,528)	(3,788)	(4,790)	(256)
Appropriations:							
Transfer to reserves							
Dividends	107,380	(279)	148	(41,968)	(7,699)	(7,295)	(438)
Balance at December 31, 2014		107,101	148				(57,400)
Realization of deemed cost							(4)
Change in interest in subsidiaries			173				
Net loss							
Other comprehensive income (loss)				(29,252)	(12,589)	(67)	(851)
Appropriations:							
Transfer to reserves							
Dividends	107,380	(279)	321	(71,220)	(20,288)	(7,362)	(1,293)
Balance at December 31, 2015		107,101	321				(100,163)

The Notes form an integral part of these Financial Statements.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **1. The Company and its operations**

Petróleo Brasileiro S.A. - Petrobras is dedicated, directly or through its subsidiaries (referred to jointly as “Petrobras”, “the Company”, or “Petrobras Group”) to prospecting, drilling, refining, processing, trading and transporting crude oil from producing onshore and offshore oil fields and from shale or other rocks, as well as oil products, natural gas and other liquid hydrocarbons. In addition, Petrobras carries out energy related activities, such as research, development, production, transport, distribution and trading of all forms of energy, as well as other related or similar activities. The Company’s head office is located in Rio de Janeiro – RJ, Brazil.

### **2. Basis of preparation**

#### **2.1. Statement of compliance and authorization of financial statements**

These consolidated financial statements have been prepared and are being presented in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and presents all relevant information related to the financial statements. The information is presented in U.S. dollars.

These financial statements have been prepared under the historical cost convention, as modified by available-for-sale financial assets, financial assets and financial liabilities measured at fair value and certain current and non-current assets and liabilities, as set out in the summary of significant accounting policies.

The annual consolidated financial statements were approved and authorized for issue by the Company’s Board of Directors in a meeting held on March 21, 2016.

#### **2.2. Functional and presentation currency**

The functional currency of Petrobras and all of its Brazilian subsidiaries is the Brazilian Real. The functional currency of most of the Petrobras entities that operate outside Brazil is the U.S. dollar. The functional currency of Petrobras Argentina is the Argentine Peso.

Petrobras has selected the U.S. Dollar as its presentation currency. The financial statements have been translated from the functional currency (Brazilian Real) into the presentation currency (U.S. Dollar) in accordance with IAS 21 – “The effects of changes in foreign exchange rates”. All assets and liabilities are translated into U.S. dollars at the closing exchange rate at the date of the financial statements; income and expenses, as well as cash flows are



translated into U.S. dollars using the average exchange rates prevailing during the year. Equity items are translated using the exchange rates prevailing at the dates of the transactions. All exchange differences arising from the translation of the consolidated financial statements from the functional currency into the presentation currency are recognized as cumulative translation adjustments (CTA) within accumulated other comprehensive income (loss) in the consolidated statements of changes in shareholders' equity.

<b>Brazilian Real x U.S. Dollar</b>	<b>Mar 2015</b>	<b>Jun 2015</b>	<b>Sep 2015</b>	<b>Dec 2015</b>	<b>Mar 2014</b>	<b>Jun 2014</b>	<b>Sep 2014</b>	<b>Dec 2014</b>
Quarterly average exchange rate	2.86	3.07	3.55	3.84	2.36	2.23	2.28	2.55
Period-end exchange rate	3.21	3.10	3.97	3.90	2.26	2.20	2.45	2.66

### **2.3. Reclassifications**

The Company has reclassified certain amounts from prior periods to conform to current period presentations. Performance bonuses advanced to customers in the amount of US\$ 605 are currently classified as other long-term receivables (and were previously classified as non-current trade and other receivables, net) in order to

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

provide a better presentation of its accounts receivable. Such reclassification did not affect the net income or shareholders' equity of the years presented.

### **3. The “Lava Jato (Car Wash) Operation” and its effects on the Company**

In 2009, the Brazilian federal police began an investigation called “Lava Jato” (Car Wash) aimed at criminal organizations engaged in money laundering in several Brazilian states. The Lava Jato investigation is extremely broad and involves numerous investigations into several criminal practices focusing on crimes committed by individuals in different parts of the country and sectors of the Brazilian economy.

Beginning in 2014, and over the course of 2015, the Brazilian Federal Prosecutor's Office focused part of its investigation on irregularities involving Petrobras's contractors and suppliers and uncovered a broad payment scheme that involved a wide range of participants, including former Petrobras personnel. Based on the information available to Petrobras, the payment scheme involved a group of companies that, between 2004 and April 2012, colluded to obtain contracts with Petrobras, overcharge the Company under those contracts and use the overpayment received under the contracts to fund improper payments to political parties, elected officials or other public officials, individual contractor personnel, former Petrobras personnel and other individuals involved in the scheme. Petrobras refers to this scheme as the “payment scheme” and to the companies involved in the scheme as “cartel members”.

In addition to the payment scheme, the investigations identified several specific instances of other contractors and suppliers that allegedly overcharged Petrobras and used the overpayment received from their contracts with the Company to fund improper payments, unrelated to the payment scheme, to certain Petrobras employees, including the former Petrobras personnel. Those contractors and suppliers are not cartel members and acted individually. Petrobras refers to these specific cases as the “unrelated payments.”

Certain former executives of Petrobras were arrested and/or charged for money-laundering and passive corruption. Other former executives of the Company as well as executives of Petrobras contractors and suppliers were or are expected to be charged as a result of the investigation. The amounts paid by Petrobras related to contracts with contractors and suppliers involved in the payment scheme were included in historical costs of its property, plant and equipment. However, the Company believes that, under International Accounting Standard IAS 16 – Property, Plant and Equipment, the portion of the payments made to these companies and used by them to make improper payments, which represents additional expenses incurred as a result of the payments scheme, should not have been capitalized. Thus, in the third quarter of 2014, the Company wrote off US\$2,527 of capitalized costs representing amounts that Petrobras overpaid for the acquisition of property, plant and equipment in prior years.

The Company has continuously monitored the investigations for additional information and to assess any potential impact on the adjustments made. No additional information has been identified that impacted the adopted calculation methodology or the recorded adjustment in 2014 for the preparation of the financial statements for the year ended December 31, 2015.

Petrobras will continue to monitor the results of the investigations and the availability of other information concerning the payment scheme. If information becomes available that indicates with sufficient precision that the estimate described above should be adjusted, Petrobras will evaluate whether the adjustment is material and, if so, recognize it.

### **3.1. The Company's response to the facts uncovered in the investigation**

The Company has been closely monitoring the investigations and cooperating fully with the Brazilian Federal Police (*Polícia Federal*), the Brazilian Public Prosecutor's Office (*Ministério Público Federal*), the Brazilian Judiciary, and other Brazilian authorities (the Federal Audit Court – *Tribunal de Contas da União* – TCU, and the Federal

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

General Controller – *Controladoria Geral da União – CGU*) in the investigation of all crimes and irregularities. We have responded to numerous requests for documents and information from these authorities.

The Company has also cooperated with the U.S. Securities and Exchange Commission (SEC) and the United States Department of Justice (DOJ), which, since November 2014, have been investigating potential violations of U.S. law based on information disclosed as a result of the Lava Jato investigation.

We have been formally recognized as a victim of the crimes identified under the Lava Jato investigation by the Brazilian Federal Prosecutor's Office and by the court hearing the case. As a result, we have entered the criminal proceedings as an assistant to the prosecutor and we have renewed our commitment to continue cooperating to clarify the issues and report them regularly to our investors and to the public in general.

We do not tolerate corrupt practices and illegal acts perpetuated by any of our employees. Accordingly, in 2015 the Company continued to implement measures to improve its corporate governance and compliance systems as part of the process of strengthening the internal control structure.

With respect to Corporate Governance, the Company's bylaws were amended to provide for the Advisory Committees, including the Audit Committee and the Compensation and Succession Committee, which is responsible for determining the qualifications for nominations of executive managers, executive officers and Board members. In addition, the Strategic Committee and Finance Committee were both created. Also, under our new corporate governance rules, the Company must be represented by two officers, acting jointly.

Additionally, Petrobras' scope of authority was reviewed and a shared authority procedure was implemented, in which at least two managers are needed for decision-making.

With respect to the compliance systems, the Company has restructured its General Ombudsman providing for a single channel for complaints. Petrobras has reviewed and updated the Petrobras Corruption Prevention Program Guide, as well as its contractual instruments and Procurement Guide. The Company is implementing qualification procedures related to the integrity measures requirements for all its contractors, providing due diligence integrity and a system of red flags (alerts). The provisional ban of contracting companies identified by the investigation has also been an important initiative adopted by the Company. A Correction Committee was formed as part of Company's organizational structure to guide, standardize and monitor the implementation of disciplinary sanctions in cases involving fraud or corruption.

In June 2015, the Company approved a revised Business Risk Management Policy (*Política de Gestão de Riscos Empresariais*), which outlines authorities, responsibilities, principles and guidelines to guide risk management initiatives in Petrobras.

Internal investigations are still in progress and are being carried out by two independent firms hired in October 2014, which report directly to a Special Committee that serves as a reporting line to the Board of Directors. The Special Committee is composed of our Governance, Risk and Compliance Officer, João Adalberto Elek Junior and two other independent and recognized experts: Ellen Gracie Northfleet, retired Chief Justice of the Brazilian Supreme Court, recognized internationally as a jurist with great experience in analyzing complex legal issues; and Andreas Pohlmann from Germany, who has broad experience in compliance and corporate governance matters.

We established Internal Investigative Committees (*Comissões Internas de Apuração*) to investigate instances of non-compliance with corporate rules, procedures or regulations. The Committees' investigation results are shared with the Brazilian authorities in accordance with their progresses.

In addition, the Company has been taking the necessary procedural steps to seek compensation for damages suffered from the improper payments scheme, including those related to its reputation.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Accordingly, the Company joined five public civil suits addressing acts of administrative misconduct, with the Brazilian Public Prosecutor's Office on February 20, 2015, and in another suit with the same subject filed by the Federal Government, including demands for compensation for reputation damages.

In order to secure future compensation to Petrobras for each civil action related to misconduct, the courts granted cautionary orders to impound defendants' property.

To the extent that any of the proceedings resulting from the Lava Jato investigation involve leniency agreements with cartel members or plea agreements with individuals pursuant to which they agree to return funds, the Company may be entitled to receive a portion of such funds.

Following a plea agreement with the Brazilian authorities, in 2015 the Company received US\$ 72 from the funds repatriated by Pedro José Barusco Filho (a former executive manager of the service area) as compensation for damages.

Nevertheless, the Company is unable to reliably estimate further recoverable amounts at this moment. Any recoverable amount will be recognized as income when received or when their economic benefits become virtually certain.

### **3.2. Approach adopted by the Company to adjust its property, plant and equipment for overpayments**

As it is not possible to specifically identify the amounts of each overpayment to contractors and suppliers, or periods over which such payments occurred, Petrobras developed a methodology to estimate the aggregate amount that it overpaid under the payment scheme, in order to determine the amount of the write-off representing the overstatement of its assets resulting from overpayments used to fund improper payments.

It continues to be impracticable to identify the exact date and amount of each overpayment by the Company to the contractors and suppliers because of the limitations described below:

- The information available to the Company in the testimony identifies the companies involved in the payment scheme and the period of time it was in effect and indicates several affected contracts, but does not specify individual contractual payments that include overcharges or the reporting periods in which overpayments occurred.
- Petrobras itself did not make or receive any improper payments. They were made by outside contractors and suppliers, so the exact amounts that the Company overpaid to fund these payments cannot be identified. The information to determine the amount by which the

Company was overcharged by the cartel members is not contained within the Company's accounting records. These records reflect the terms of the contract entered into by the Company, which entailed payments that were inflated because of the conspiracy among the cartel members and the former Petrobras personnel to overcharge Petrobras. Since the Company cannot identify the amount of overpayments for specific contractual payments or in specific accounting periods, it cannot determine the period in which to adjust property, plant and equipment.

- Two independent firms are conducting an independent internal investigation, under the direction of the Special Committee mentioned above. The independent internal investigation continues and is not expected to provide additional quantitative information of a kind to support an adjustment to the Company's financial statements. The information available to the investigators is limited to internal information of Petrobras, so it will not be able to produce specific identified information on the amount by which the Company was overcharged. The money-laundering activities alleged to have occurred were designed to hide the origins and amounts of the funds involved, so specific accounting should not be expected.

F-12

---

## **Petróleo Brasileiro S.A. – Petrobras**

### Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

- The ongoing investigations by Brazilian authorities focus on the criminal liability of individuals, and not on establishing a full accounting of the amounts that Petrobras was overcharged by the cartel members or all improper payments made by contractors and suppliers from the Company's contract payments. These investigations may take several years before all the evidence and allegations are evaluated.
- The Brazilian authorities have filed actions against contractors and suppliers and their respective representatives. In these actions, the prosecutors have sought judicial remedies for administrative misconduct (*ação de improbidade administrativa*) using 3% of the contract prices paid to the contractors and suppliers to measure the actual damages attributable to the payment scheme, which is consistent with the methodology used by the Company to account for the effects of the payment scheme. The scope of this process is not expected to produce a full accounting of all improper payments, even after the significant amount of time the investigations by Brazilian authorities may take. Brazilian law does not provide for discovery in civil proceedings, so the information that is produced in these proceedings would not be expected to exceed the information produced in the investigation and the criminal proceedings.

As it is impracticable to identify the periods and amounts of overpayments incurred, the Company developed a methodology to estimate the adjustment incurred in property, plant and equipment in the third quarter of 2014 using the five steps described below:

- (1) Identify contractual counterparties: the Company listed all the companies identified as cartel members, and using that information the Company identified all of the contractors and suppliers that were either so identified or were consortia including entities so identified.
- (2) Identify the period: the Company concluded from the testimony that the payment scheme was operating from 2004 through April 2012.
- (3) Identify contracts: the Company identified all contracts entered into with the counterparties identified in step 1 during the period identified in step 2, which included supplemental contracts when the original contract was entered into between 2004 and April 2012. It has identified all of the property, plant and equipment related to those contracts.
- (4) Identify payments: the Company calculated the total contract values under the contracts identified in step 3.
- (5) Apply a fixed percentage to the amount determined in Step 4: the Company estimated the aggregate overpayment by applying a percentage indicated in the depositions (3%) to the total amounts for identified contracts.



The calculation considered all the recorded amounts in the Company's books and records from 2004 through September 2014 with respect to contracts initially entered into between 2004 and April 2012, and any related supplemental contracts, between the companies of the Petrobras group and the cartel members (individually or in a consortium). This broad scope was used to produce the best estimate for quantifying the aggregate amount of the overpayment, even if there was no specific evidence of overcharging or improper payments under every affected contract. The Company also identified amounts recorded in its books and records concerning specific contracts and projects with the non-cartel members to account for the amounts those companies overcharged Petrobras to fund improper payments they made, unrelated to the payment scheme and the cartel.

The Company clarifies that, since 2015, any supplemental contract involving the Company and companies included in the scope of this methodology is entered into only in exceptional circumstances. It requires specific compliance processes aiming to mitigate risk of fraud and corruption, and an analysis of the indispensability of the supplemental contract to the Company's business purposes. The assessment includes an economic and financial analysis to determine that the supplemental contract, independently of the analysis of the original

## **Petróleo Brasileiro S.A. – Petrobras**

### Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

contract, is advantageous for the Company and will not involve improper payments. Accordingly, supplemental contracts signed since 2015 do not impact the previous adjustment made.

For overpayments attributable to non-cartel members, unrelated to the payment scheme, the Company included in the write-off for incorrectly capitalized overpayments the specific amounts of improper payments or percentages of contract values, as described in the testimony, which were used by those suppliers and contractors to fund improper payments.

The Company has a number of ongoing projects in which the original contract was entered into between 2004 and April 2012. The approach adopted by the Company considers that the overcharge was applied over total contract values. These include contract payments to be incurred by Petrobras in future periods, because it is impracticable to allocate the aggregate overpayments to specific periods and the portion of the overcharge that relates to future contract payments may have been charged to the Company in prior periods. Therefore, the write-off of overpayments incorrectly capitalized took into account the total contract values and not only contract payments already incurred. However, as mentioned above, based on the available information, the Company believes that the activity of the cartel associated with the improper payment scheme ceased after April 2012 and that, considering all the developments in the ongoing criminal investigation, the improper payments related to the payment scheme have stopped.

Petrobras believes that this methodology produces the best estimate for the aggregate overstatement of its property, plant and equipment resulting from the payment scheme, in the sense that it represents the upper bound of the range of reasonable estimates. The estimate assumes that all contracts with the identified counterparties were affected and that 3% represents the amount by which the Company overpaid on those contracts. Both assumptions are supported by the testimony, even though some testimony indicated lower percentages with respect to certain contracts, a shorter period (2006 to 2011), or fewer contractors involved.

The Company considered all available information for purposes of the preparation of the financial statements for the year ended December 31, 2015 and did not identify any additional information that would impact the adopted calculation methodology and consequently require additional write-offs. Information available to the Company included:

- Testimonies obtained through plea agreement by the Brazilian Public Prosecutor's Office that have been made public;
- Actions of administrative misconduct filed by the Brazilian Public Prosecutor's Office against cartel members for material damages attributable to the improper payments scheme;

- Criminal actions filed by the Brazilian Public Prosecutor's Office against individuals involved in the improper payments scheme, as representatives of contractors, intermediaries or former employees of Petrobras;
- Court decisions in the actions of administrative misconduct and criminal actions filed by the Brazilian Public Prosecutor's Office: including a decree of property unavailability of part of defendants, acceptance of provisional arrest of investigated persons, receipt of complaints, among others;
- Issuance of lower court judgments in certain of the criminal actions filed by the Brazilian Public Prosecutor's Office;
- Leniency agreement of a cartel member Setal Engenharia e Construções with Brazilian authorities;
- Statement of Conduct Cessation of Construções e Comércio Camargo Correa, a cartel member, with the Brazilian authorities;

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

- Technical Note 38/2015 of the Administrative Council for Economic Defense - CADE , that justified the initiation of administrative proceedings of the alleged cartel members.

Petrobras closely monitored the progress of both the investigation by Brazilian authorities and the independent law firms throughout 2015 when substantial progress was made. As a result of their work, no new facts that materially impact the Company's previously recorded adjustments or change the methodology adopted were discovered. The Company will continuously monitor the investigations for additional information and will review its potential impact on the adjustment made.

### **3.3. Investigations involving the Company**

Petrobras is not a target of the Lava Jato investigation and is formally recognized as a victim of the improper payments scheme by the Brazilian Authorities.

On November 21, 2014, Petrobras received a subpoena from the U.S. Securities and Exchange Commission (SEC) requesting certain documents and information about the Company. The Company has been complying with the subpoena and intends to continue to do so, working with the independent Brazilian and U.S. law firms that were hired to conduct an independent internal investigation.

On December 15, 2015, the State of São Paulo Public Prosecutor's Office issued the Order of Civil Inquiry 01/2015, establishing a civil proceeding to investigate the existence of potential damages caused by Petrobras to investors in the stock market. The Company will provide all relevant information required by the authorities.

### **3.4. Legal proceedings involving the Company**

Note 30 provides information about class actions and other material legal proceedings.

## **4. Summary of significant accounting policies**

The accounting policies set out below have been consistently applied to all periods.

### **4.1. Basis of consolidation**

The consolidated financial statements include the financial information of Petrobras and the entities it controls (its subsidiaries), joint operations and consolidated structured entities.

Control is achieved when Petrobras: i) has power over the investee; ii) is exposed, or has rights, to variable returns from involvement with the investee; and iii) has the ability to use its

power to affect its returns.

Subsidiaries are consolidated from the date on which control is obtained until the date that such control no longer exists, by using accounting policies consistent of those adopted by Petrobras.

Note 11 sets out the consolidated entities and other direct investees.

Petrobras has no equity interest in its consolidated structured entities and control is not determined by voting rights, but by the power the Company has over the relevant operating activities of such entities. Consolidated structured entities are set out below:

F-15

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Consolidated structured entities</b>	<b>Country</b>	<b>Main segment</b>
Charter Development LLC – CDC	U.S.A	E&P
Companhia de Desenvolvimento e Modernização de Plantas Industriais – CDMPI	Brazil	RT&M
PDET Offshore S.A.	Brazil	E&P
Fundo de Investimento em Direitos Creditórios Não-padronizados do Sistema Petrobras	Brazil	Corporate
Fundo de Investimento em Direitos Creditórios Padronizados do Sistema Petrobras	Brazil	Corporate

The consolidation procedures involve combining assets, liabilities, income and expenses, according to their function and eliminating all intragroup balances and transactions, including unrealized profits arising from intragroup transactions.

**4.2. Business segment reporting**

The information related to the Company's operating segments (business areas) is prepared based on items directly attributable to each segment, as well as items that can be allocated to each segment on a reasonable basis.

The measurement of segment results includes transactions carried out with third parties and transactions between business areas, which are charged at internal transfer prices defined by the relevant areas using methods based on market parameters.

The information of operating segments is presented in accordance with Company's business management.

As a result of changes in the Company's internal organization in 2015, the international department was extinguished and the composition of the business segments was changed to reflect the allocation of the international activities to E&P, RT&M and Gas & Power, according to the nature of those activities.

The Company operates under the following business areas:

a) Exploration and Production (E&P): this segment covers the activities of exploration, development and production of crude oil, NGL (natural gas liquid) and natural gas in Brazil

and abroad, for the primary purpose of supplying its domestic refineries and the sale of surplus crude oil and oil products produced in the natural gas processing plants to the domestic and foreign markets. The E&P segment also operates through partnerships with other companies;

b) Refining, Transportation and Marketing (RT&M): this segment covers the refining, logistics, transport and trading of crude oil and oil products activities in Brazil and abroad, exporting of ethanol, extraction and processing of shale, as well as holding interests in petrochemical companies in Brazil;

c) Gas and Power: this segment covers the activities of transportation and trading of natural gas produced in Brazil and abroad, imported natural gas, transportation and trading of LNG (liquid natural gas), generation and trading of electricity, as well as holding interests in transporters and distributors of natural gas and in thermoelectric power plants in Brazil, in addition to being responsible for the fertilizer business;

d) Biofuels: this segment covers the activities of production of biodiesel and its co-products, as well as the ethanol-related activities: equity investments, production and trading of ethanol, sugar and the surplus electric power generated from sugarcane bagasse; and

e) Distribution: this segment includes the activities of Petrobras Distribuidora S.A., which operates through its own retail network and wholesale channels to sell oil products, ethanol and vehicle natural gas in Brazil to retail, commercial and industrial customers, as well as other fuel wholesalers. This segment also includes distribution of oil products operations abroad (South America).

F-16

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The corporate segment comprises the items that cannot be attributed to the other segments, notably those related to corporate financial management, corporate overhead and other expenses, including actuarial expenses related to the pension and medical benefits for retired employees and their dependents.

Assets and the statement of income by business area are presented in note 29.

### **4.3. Financial instruments**

#### **4.3.1. Cash and cash equivalents**

Cash and cash equivalents comprise cash in hand, term deposits with banks and short-term highly liquid financial investments that are readily convertible to known amounts of cash, are subject to insignificant risk of changes in value and have a maturity of three months or less from the date of acquisition.

#### **4.3.2. Marketable securities**

Marketable securities comprise investments in debt or equity securities. These instruments are initially measured at fair value, are classified according to the Company's intention and ability and are subsequently measured as set out below:

- Fair value through profit or loss – includes financial instruments purchased and held for trading in the short term. These instruments are measured at fair value with changes recognized in the statement of income in finance income (expenses).
- Held-to-maturity – includes non-derivative financial instruments with fixed or determinable payments and fixed maturity, for which Management has the clear intention and ability to hold to maturity. These instruments are measured at amortized cost using the effective interest rate method.
- Available-for-sale – includes non-derivative financial instruments that are designated as available for sale or are not classified as financial assets at fair value through profit or loss or held-to-maturity investments. These instruments are measured at fair value and changes are recognized in other comprehensive income, in the shareholders' equity and recycled to the statement of income when the instruments are derecognized.

Subsequent changes attributable to interest income or changes in foreign exchange rates or inflation indexation (price indexes) are recognized in the statement of income for all categories, when applicable.



#### **4.3.3. Trade receivables**

Trade receivables are initially measured at the fair value of the consideration to be received and, subsequently, at amortized cost using the effective interest rate method and adjusted for allowances for impairment or uncollectible receivables.

The Company recognizes an allowance for impairment of trade receivables when there is objective evidence that a loss event occurred after the initial recognition of the receivable and has an impact on the estimated future cash flows, which can be reliably estimated. Impairment losses on trade receivables are recognized in the statement of income in selling expenses.

#### **4.3.4. Loans and financing (Debt)**

Loans and financing are initially recognized at fair value less transaction costs incurred and subsequently measured at amortized cost using the effective interest rate method.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **4.3.5. Derivative financial instruments**

Derivative financial instruments are recognized in the statement of financial position as assets or liabilities and are initially and subsequently measured at fair value.

Gains or losses arising from changes in fair value are recognized in the statement of income in finance income (finance expense), unless the derivative is qualified and designated for hedge accounting.

### **4.3.6. Cash flow hedge accounting**

The Company mitigates the risk of its results through the use of derivative and non-derivative instruments, some of which qualify for cash flow hedge accounting.

Hedging relationships qualify for cash flow hedges when they involve the hedging of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction.

Gains or losses relating to the effective portion of the hedge are recognized in other comprehensive income, in the shareholders' equity and recycled to the statement of income in finance income (expense) in the periods when the hedged item affects the statement of income. The gains or losses relating to the ineffective portion are immediately recognized in the statement of income.

When the hedging instrument expires or is sold, terminated or exercised or no longer meets the criteria for hedge accounting or the Company revokes the designation, the cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income from the period when the hedge was effective is recorded separately in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is immediately reclassified from equity to the statement of income.

## **4.4. Inventories**

Inventories are determined by the weighted average cost method and mainly comprise crude oil, intermediate products and oil products, as well as natural gas, LNG, fertilizers and biofuels, stated at the lower of the average cost, and their net realizable value.

Crude oil and LNG inventories can be traded or used for production of oil products and/or electricity generation, respectively.

Intermediate products are those product streams that have been through at least one of the refining processes, but still need further treatment, processing or converting to be available for sale.

Biofuels mainly include ethanol and biodiesel inventories.

Maintenance materials, supplies, and others are mainly comprised of production supplies and operating and consumption materials used in the operations of the Company, stated at the average purchase cost, not exceeding replacement cost.

Net realizable value is the estimated selling price of inventory in the ordinary course of business, less estimated cost of completion and estimated expenses to complete its sale.

The amounts presented in the categories above include imports in transit, which are stated at the identified cost.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **4.5. Investments in other companies**

An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but not the ability to exercise control or joint control over those policies. The definition of control is set out in note 4.1.

A joint arrangement is an arrangement over which two or more parties have joint control (pursuant to contractual provisions). A joint arrangement is classified either as a joint operation or as a joint venture depending on the rights and obligations of the parties to the arrangement.

In a joint operation, the parties have rights to the assets and obligations for the liabilities related to the arrangement, while in a joint venture the parties have rights to the net assets of the arrangement.

Profit or loss, assets and liabilities related to joint ventures and associates are accounted for by the equity method. In a joint operation the Company recognizes the amount of its share of assets, liabilities and related income and expenses.

Accounting policies of joint ventures and associates have been adjusted, where necessary, to ensure consistency with the policies adopted by Petrobras. Distributions received from an investee reduce the carrying amount of the investment.

### **4.6. Business combinations and goodwill**

Acquisitions of businesses are accounted for using the acquisition method when control is obtained. Combinations of entities under common control are not accounted for as business combinations.

The acquisition method requires that the identifiable assets acquired and the liabilities assumed be measured at the acquisition-date fair value. Amounts paid in excess of the fair value are recognized as goodwill. In the case of a bargain purchase, a gain is recognized in the statement of income when the acquisition cost is lower than the acquisition-date fair value of the net assets acquired.

Changes in ownership interest in subsidiaries that do not result in loss of control of the subsidiary are equity transactions. Any excess of the amounts paid/received over the carrying value of the ownership interest acquired/disposed is recognized in shareholders' equity as changes in interest in subsidiaries.

#### **4.7. Oil and Gas exploration and development expenditures**

The costs incurred in connection with the exploration, appraisal and development of crude oil and natural gas production are accounted for using the successful efforts method of accounting, as set out below:

- Costs related to geological and geophysical activities are expensed when incurred.
- Amounts paid for obtaining concessions for exploration of crude oil and natural gas (capitalized acquisition costs) are initially capitalized.
- Costs directly attributable to exploratory wells pending determination of proved reserves are capitalized within property, plant and equipment. Unsuccessful exploratory wells are charged to expense when they are considered dry holes, uneconomic (did not encounter potentially economic oil and gas quantities) or were abandoned due to mechanical accidents. Exploratory wells that have discovered oil and gas reserves, which cannot be classified as proved when drilling is completed, continue to be capitalized if the well has found a sufficient quantity of reserves to justify its completion as a producing well and progress on assessing the reserves and the economic and operating viability of the project is under way. An internal commission of technical executives of Petrobras

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

reviews these conditions monthly for each well, by analysis of geoscience and engineering data, existing economic conditions, operating methods and government regulations.

- Costs related to exploratory wells drilled in areas of unproved reserves are charged to expense when determined to be dry or uneconomic.

- Costs related to the construction, installation and completion of infrastructure facilities, such as drilling of development wells, construction of platforms and natural gas processing units, construction of equipment and facilities for the extraction, handling, storing, processing or treating crude oil and natural gas, pipelines, storage facilities, waste disposal facilities and other related costs incurred in connection with the development of proved reserve areas are capitalized within property, plant and equipment.

### **4.8. Property, plant and equipment**

Property, plant and equipment are measured at the cost to acquire or construct, including all costs necessary to bring the asset to working condition for its intended use and the estimated cost of dismantling and removing the asset and restoring the site, reduced by accumulated depreciation and impairment losses.

A condition of continuing to operate certain items of property, plant and equipment, such as industrial plants, offshore plants and vessels is the performance of regular major inspections and maintenance. Those expenditures are capitalized if the recognition criteria are met or otherwise expensed when incurred. The capitalized costs are depreciated over the period through to the next major maintenance date.

Spare parts are capitalized when they are expected to be used during more than one period and can only be used in connection with an item of property, plant and equipment. These are depreciated over the useful life of the item of property, plant and equipment to which they relate.

General and specific borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalized as part of the costs of these assets. General borrowing costs are capitalized based on the Company's weighted average of the cost of borrowings outstanding applied over the balance of assets under construction. Borrowing costs are amortized during the useful lives of the assets or by applying the unit-of-production method to the related assets. The Company suspends capitalization of borrowing costs during extended periods in which it suspends active development of a qualifying asset.

Except for assets with useful lives shorter than the life of the field, which are depreciated based on the straight-line method, depreciation, depletion and amortization of proved oil and

gas producing properties are accounted for pursuant to the unit-of-production method.

Assets with useful lives shorter than the life of the field, floating platforms and assets that are unrelated to oil and gas production are depreciated based on the straight line method.

The unit-of-production method of depreciation (amortization) is computed based on a unit-of-production basis (monthly production) over the proved developed oil and gas reserves, applied on a field-by-field basis.

Amortization of amounts paid for obtaining concessions for exploration of oil and natural gas of producing properties, such as signature bonuses (capitalized acquisition costs) and the acquisition costs with respect to the Assignment Agreement (note 12.3) in the pre-salt area is recognized using the unit-of-production method, computed based on the units of production over the total proved oil and gas reserves, applied on a field-by-field basis.

Except for land, which is not depreciated, other property, plant and equipment are depreciated on a straight-line basis. Note 12 provides further information about the estimated useful life by class of assets.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **4.9. Intangible assets**

Intangible assets are measured at the acquisition cost, less accumulated amortization and impairment losses and comprise rights and concessions, including the signature bonus paid for obtaining concessions for exploration of oil and natural gas (capitalized acquisition costs); public service concessions; trademarks; patents; software and goodwill.

Signature bonuses paid for obtaining concessions for exploration of oil and natural gas are initially capitalized within intangible assets and are transferred to property, plant and equipment upon the declaration of commerciality. The acquisition costs with respect to the Assignment Agreement were reclassified to property, plant and equipment during 2013 and 2014. On December 29, 2014 the Company submitted the declaration of commerciality of the last area of the agreement to the Brazilian Agency of Petroleum, Natural Gas and Biofuels (*Agência Nacional de Petróleo, Gás Natural e Biocombustíveis*) - ANP. Signature bonuses are not amortized before they are transferred to property, plant and equipment.

Intangible assets with a finite useful life, other than amounts paid for obtaining concessions for exploration of oil and natural gas of producing properties, are amortized over the useful life of the asset on a straight-line basis.

Internally-generated intangible assets are not capitalized and are expensed as incurred, except for development costs that meet the recognition criteria related to completion and use of assets, probable future economic benefits, and others.

Intangible assets with an indefinite useful life are not amortized but are tested annually for impairment considering individual assets or cash-generating units. Their useful lives are reviewed annually to determine whether events and circumstances continue to support an indefinite useful life assessment for those assets. If they do not, the change in the useful life assessment from indefinite to finite is accounted for on a prospective basis.

### **4.10. Impairment**

Property, plant and equipment and intangible assets with definitive lives are tested for impairment when there is an indication that the carrying amount may not be recoverable. Assets related to development of oil and gas and assets that have indefinite useful lives, such as goodwill acquired in business combinations are tested for impairment annually, irrespective of whether there is any indication of impairment.

The impairment test is performed by a comparison of the carrying amount of an individual asset or a cash-generating unit (CGU) with its recoverable amount. Whenever the recoverable amount is less than the carrying amount, an impairment loss is recognized to reduce the



carrying amount to the recoverable amount. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs of disposal and its value in use. Considering the specificity of the Company's assets, the existing synergies between the Company's assets and businesses, as well as the expectation of the use of its assets for their remaining useful lives, value in use is generally used by the Company for impairment testing purposes, except when specifically indicated.

Value in use is estimated based on the present value of the risk-adjusted (for specific risks) future cash flows expected to arise from the continuing use of an asset or cash-generating unit (based on assumptions that represent the Company's best estimates), discounted at a pre-tax discount rate. This rate is obtained from the Company's post-tax weighted average cost of capital (WACC). Cash flow projections are mainly based on the following assumptions: prices based on the Company's most recent strategic plan; production curves associated with existing projects in the Company's portfolio, operating costs reflecting current market conditions, and investments required for carrying out the projects.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

For purposes of the impairment test, assets are grouped at the smallest identifiable group that generates largely independent cash inflows from other assets or groups of assets (the cash-generating unit). Assets related to exploration and development of oil and gas are tested annually for impairment on a field-by-field or group of fields basis, based on cash flow projections.

Reversal of previously recognized impairment losses is permitted for assets other than goodwill.

### **4.11. Leases**

Leases that transfer substantially all the risks and rewards incidental to ownership of the leased item are recognized as finance leases.

For finance leases, when the Company is the lessee, assets and liabilities are recognized at the lower of the fair value of the leased property or the present value of the minimum lease payments, both determined at the inception of the lease.

Capitalized lease assets are depreciated on a systematic basis consistent with the depreciation policy the Company adopts for property, plant and equipment that are owned. Where there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, capitalized lease assets are depreciated over the shorter of the lease term or the estimated useful life of the asset.

When the Company is the lessor, a receivable is recognized at the amount of the net investment in the lease.

If a lease does not transfer substantially all the risks and rewards incidental to ownership of the leased item, it is classified as an operating lease. Operating leases are recognized as expenses over the period of the lease.

Contingent rents are recognized as expenses when incurred.

### **4.12. Assets classified as held for sale**

Non-current assets, disposal groups and liabilities directly associated with those assets are classified as held for sale if their carrying amounts will, principally, be recovered through the sale transaction rather than through continuing use.

The Company approved a divestment plan and is considering opportunities to sell different assets and businesses. The divestment portfolio is dynamic because changes in market

conditions and/or in the Company's evaluation of its different businesses may affect any ongoing negotiation or potential transaction.

The condition for classification as held for sale is met only when the sale is approved by the Company's Board of Directors and the asset or disposal group is available for immediate sale in its present condition and there is the expectation that the sale occurs within 12 months after the classification as held for sale. In addition, the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification as held for sale.

However, events or circumstances may extend the period to complete the sale beyond one year. An extension of the period required to complete a sale does not preclude an asset (or disposal group) from being classified as held for sale if the delay is caused by events or circumstances beyond the Company's control and there is sufficient evidence that it remains committed to its plan to sell the assets (or disposal groups).

Assets (or disposal groups) classified as held for sale and the associated liabilities are measured at the lower of their carrying amount and fair value less costs to sell. Assets and liabilities are presented separately in the statement of financial position.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **4.13. Decommissioning costs**

Decommissioning costs are future obligations to perform environmental restoration, dismantle and remove a facility when it terminates its operations due to the exhaustion of the area or economic feasibility.

Costs related to the abandonment and dismantling of areas are recognized as part of the cost of an asset (with a corresponding liability) based on the present value of the expected future cash outflows, discounted at a risk-adjusted rate when a future legal obligation exists and can be reliably measured.

The estimates for abandonment and dismantling of areas are revised annually and depreciated on the same basis of its corresponding property, plant and equipment, based on the class of the asset. Unwinding of the discount of the corresponding liability is recognized as a finance expense, when incurred.

Future decommissioning costs for oil and natural gas producing properties are initially recognized after a field is declared to be commercially viable, on a field-by-field basis, and are revised annually.

### **4.14. Provisions, contingent assets and contingent liabilities**

Provisions are recognized when there is a present obligation (legal or constructive) that arises from past events and for which it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, which must be reasonably estimable.

Contingent assets are not recognized, except when the inflow of economic benefits becomes virtually certain.

Contingent liabilities for which the likelihood of loss is considered possible or which are not reasonably estimable are not recognized in the financial statements but are disclosed unless the expected outflow of resources embodying economic benefits is considered remote.

### **4.15. Income taxes**

Income tax expense for the period comprises current and deferred tax.

#### **Current income taxes**

Brazil has enacted corporate tax reform, Law 12.973 as of May 13, 2014. Beginning in 2015, the Company has adopted the provisions of the enacted law in order to determine its taxable profit for the year. The prior tax regime, called the Transition Tax Regime (*Regime Tributário de Transição* - RTT) was revoked and the impact of the adoption of the new tax regime is set out in note 21.5.

Current tax expense is computed based on taxable profit for the year, calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Current income taxes are offset when they relate to income taxes levied on the same taxable entity and tax authority, when a legally right and intention to set off current tax assets and current tax liabilities exists.

### **Deferred income taxes**

Deferred income taxes are recognized on temporary differences between the tax base of an asset or liability and its carrying amount. Deferred income tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and carryforward of unused tax losses or credits to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilized. When there are insufficient taxable temporary differences

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

relating to the same taxation authority and the same taxable entity, a deferred tax is recognized to the extent that it is probable that the entity will have sufficient taxable profit in future periods, based on projections supported by the Company's Business and Management plan and approved by Management.

Deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset when they relate to income taxes levied on the same taxable entity, when a legally enforceable right to set off current tax assets and current tax liabilities exists and when the deferred tax assets and deferred tax liabilities relate to taxes levied by the same tax authority on the same taxable entity.

### **4.16. Employee benefits (Post-Employment)**

Actuarial commitments related to post-employment defined benefit plans and health-care plans are recognized as liabilities in the statement of financial position based on actuarial calculations which are revised annually by an independent qualified actuary (updating for material changes in actuarial assumptions and estimates of expected future benefits), using the projected unit credit method, net of the fair value of plan assets, when applicable, from which the obligations are to be directly settled.

Actuarial assumptions include demographic assumptions, financial assumptions, medical costs estimates, historical data related to benefits paid and employee contributions.

Under the projected credit unit method, each period of service gives rise to an additional unit of benefit entitlement and each unit is measured separately to determine the final obligation.

Changes in the net defined benefit liability (asset) are recognized when they occur, as follows: i) service cost and net interest cost in the statement of income; and ii) remeasurements in other comprehensive income.

Service cost comprises: (i) current service cost, which is the increase in the present value of the defined benefit obligation resulting from employee service in the current period; (ii) past service cost, which is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting from a plan amendment (the introduction, modification, or withdrawal of a defined benefit plan) or a curtailment (a significant reduction by the entity in the number of employees covered by a plan); and (iii) any gain or loss on settlement.

Net interest on the net defined benefit liability (asset) is the change during the period in the net defined benefit liability (asset) that arises from the passage of time.

Remeasurement of the net defined benefit liability (asset) is recognized in shareholders' equity, in other comprehensive income, and comprises: (i) actuarial gains and losses and; (ii) the return on plan assets, less interest income earned on these assets.

The Company also contributes amounts to defined contribution plans, that are expensed when incurred and are computed based on a percentage of salaries.

#### **4.17. Share capital and distributions to shareholders**

Share capital comprises common shares and preferred shares. Incremental costs directly attributable to the issue of new shares (share issuance costs) are presented (net of tax) in shareholders' equity as a deduction from the proceeds.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

To the extent the Company proposes distributions to shareholders, such dividends and interest on capital are determined in accordance with the limits defined in the Brazilian Corporation Law and in the Company's bylaws.

Interest on capital is a form of dividend distribution, which is deductible for tax purposes in Brazil to the entity distributing interest on capital. Tax benefits from the deduction of interest on capital are recognized in the statement of income.

### **4.18. Other comprehensive income**

Other comprehensive income includes changes in fair value of available-for-sale financial instruments, effective portion of cash flow hedge, actuarial gains and losses (remeasurement of the net defined benefit liability) and cumulative translation adjustment.

### **4.19. Government grants**

A government grant is recognized when there is reasonable assurance that the grant will be received and the Company will comply with the conditions attached to the grant.

Government grants related to expenses are recognized as revenue in the statement of income on a systematic basis over the periods in which the Company recognizes as expenses the related costs for which the grants are intended to compensate. Government grants related to assets are initially recognized as deferred income and transferred to the statement of income over the useful life of the asset on a straight-line basis.

### **4.20. Recognition of revenue, costs and expenses**

Revenue is recognized when it is probable that the economic benefits associated with the transaction will flow to the Company and the amount of revenue and the costs incurred or to be incurred in the transaction can be measured reliably. Revenue is measured at the fair value of the consideration received or receivable for products sold and services provided in the normal course of business, net of returns, discounts and sales taxes.

Revenues from the sale of crude oil and oil products, petrochemical products, natural gas, biofuels and other related products are recognized when the Company retains neither continuing managerial involvement nor effective control over the products sold and the significant risks and rewards of ownership have been transferred to the customer, which is usually when legal title passes to the customer, pursuant to the terms of the sales contract. Sales revenues from freight and other services provided are recognized based on the stage of completion of the transaction.



Finance income and expense mainly comprise interest income on financial investments and government bonds, interest expense on debt, gains or losses on marketable securities measured at fair value, as well as net foreign exchange and inflation indexation charges. Finance expense does not include borrowing costs which are capitalized as part of the costs of these assets.

Revenue, costs and expenses are recognized on the accrual basis.

## **5. Critical accounting policies: key estimates and judgments**

The preparation of the consolidated financial information requires the use of estimates and judgments for certain transactions and their impacts on assets, liabilities, income and expenses. The assumptions are based on past transactions and other relevant information and are periodically reviewed by Management, although the actual results could differ from these estimates.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Information about those areas that require the most judgment or involve a higher degree of complexity in the application of the accounting practices and that could materially affect the Company's financial condition and results of operations are set out as follows:

### **5.1. Oil and gas reserves**

Oil and gas reserves are estimated based on economic, geological and engineering information, such as well logs, pressure data and drilling fluid sample data and are used as the basis for calculating unit-of-production depreciation, depletion and amortization rates and for impairment tests.

These estimates require the application of judgment and are reviewed at least annually based on a re-evaluation of already available geological, reservoir or production data and new geological, reservoir or production data, as well as changes in prices and costs that are used in the estimation of reserves. Revisions can also result from significant changes in the Company's development strategy or in the production capacity of equipment and facilities.

The Company determines its oil and gas reserves both pursuant to the SEC and the ANP/SPE (Brazilian Agency of Petroleum, Natural Gas and Biofuels / Society of Petroleum Engineers) criteria. The main differences between the two criteria are: selling price of crude oil (*ANP/SPE* establishes the use of the Company's forecasted price, while SEC determines the use an average price considering the each first day of the last 12 months); concession period (*ANP* permits for the use of reserve quantities after the concession period). Additionally, pursuant to the SEC criteria, only proved reserves are determined, while proved and unproved reserves are determined pursuant to the *ANP/SPE* criteria.

According to the definitions prescribed by the SEC, proved oil and gas reserves are the estimated quantities which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic, operating conditions (i.e., prices and costs as of the date the estimate is made) and government regulations. Proved reserves are subdivided into developed and undeveloped reserves.

Proved developed oil and gas reserves are reserves that can be expected to be recovered through existing wells with existing equipment and operating methods.

Although the Company is reasonably certain that proved reserves will be produced, the timing and amount recovered can be affected by a number of factors including completion of development projects, reservoir performance, regulatory aspects and significant changes in long-term oil and gas price levels.

Other information about reserves is presented as supplementary information.

**a) Oil and gas reserves: depreciation, depletion and amortization**

Depreciation, depletion and amortization are measured based on estimates of reserves prepared by the Company's technicians in a manner consistent with SEC definitions. Revisions to the Company's proved developed and undeveloped reserves impact prospectively the amounts of depreciation, depletion and amortization recognized in the statement of income and the carrying amounts of oil and gas properties assets.

Therefore, considering all other variables being constant, a decrease in estimated proved reserves would increase, prospectively, depreciation, depletion and amortization expense, while an increase in reserves would reduce depreciation, depletion and amortization.

Notes 4.8 and 12 provide more detailed information about depreciation, amortization and depletion.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **b) Oil and gas reserves: impairment testing**

The Company assesses the recoverability of the carrying amounts of oil and gas exploration and development assets based on their value in use, as defined in note 4.10. In general, analyses are based on proved reserves and probable reserves pursuant to the ANP/SPE definitions.

The Company performs asset valuation analyses on an ongoing basis as a part of its management program by reviewing the recoverability of their carrying amounts based on estimated volumes of oil and gas reserves, as well as estimated future oil and natural gas prices.

Oil and gas exploration and production assets are tested annually for impairment, irrespective of whether there is any indication of impairment.

The markets for crude oil and natural gas have a history of significant price volatility and although prices can drop precipitously, industry prices over the long term will continue to be driven by market supply and demand fundamentals. The impairment tests that the Company performs make use of its long-term price assumptions used in its planning and budgeting processes and its capital expenditure decisions, which are considered reasonable estimates, given market indicators and experience. When determining the value in use of those assets, short-term price volatility affects the cash flow estimates for the first years.

Lower future oil and gas prices, when considered long-term trends, as well as negative impacts of significant changes in reserve volumes, production curve expectations, lifting costs or discount rates could trigger the need for impairment assessment.

See notes 4.8 and 12 for more detailed information about oil and natural gas exploration and development assets.

### **5.2. Identifying cash-generating units for impairment testing**

Identifying cash-generating units (CGUs) requires management assumptions and judgment, based on the Company's business and management model.

Changes in the aggregation of assets into Cash-Generating units (CGUs) could result in additional impairment charges or reversals. Such changes may occur when investment, strategic or operational factors result in changes in the interdependencies between those assets and, consequently, alter the aggregation of assets into CGUs.

The assumptions set out below have been consistently applied by the Company:

**Exploration and Production CGU's:**

i) Crude oil and natural gas producing properties CGU: comprised of exploration and development assets related to crude oil and natural gas fields and groups of fields in Brazil and abroad. As of December 31, 2015, the Company changed the aggregation of certain crude oil and natural gas producing properties located in mid-southern Campos Basin into a cash-generating unit (the Centro-Sul group of crude oil and natural gas producing properties). Certain fields were disaggregated from the CGU and impairment tests were run separately for those individual fields. The manner by which the CGU is identified was changed as a result of: (a) the beginning of production shutdown in the Bicudo field; (b) the sale of Bijupirá and Salema fields; and (c) a reassessment of the areas' natural gas production process, reflecting an increase in the domestic demand for natural gas in the thermoelectric industry, which resulted in a decrease in the need for natural gas reinjection. Accordingly, the following fields have been disaggregated from the CGU: Espadarte, Linguado, Bicudo, Badejo, Pampo, Trilha, Tartaruga Verde and Tartaruga Mestiça; and

F-27

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

ii) Drilling Rigs CGU: comprised of drilling rigs, where each drilling rig represents an independent CGU.

### **Refining, transportation and marketing CGU's:**

i) Downstream CGU: a single CGU comprised of all refineries and associated assets, terminals and pipelines, as well as logistics assets operated by Transpetro. This CGU was identified based on the concept of integrated optimization and performance management, which focus on the global performance of the CGU, allowing a shift of margins from one refinery to another. Pipelines and terminals are an integral part and interdependent portion of the refining assets, required to supply the market. During the quarter ended December 31, 2014, Complexo Petroquímico do Rio de Janeiro (Comperj) and the second refining unit of Refinaria Abreu e Lima (RNEST), both assets under construction, were removed from the Downstream CGU and assessed for impairment individually due to a range of circumstances that include: a) postponement of projects; b) a decrease in expected future operating revenues following the decline in international crude oil prices, c) the devaluation of Brazilian Real, d) difficulties in accessing the capital markets, and e) insolvency of contractor and suppliers and a consequent shortage of qualified contractors and suppliers (as a result of the difficulties created for suppliers by the Lava Jato investigation or otherwise);

ii) Petrochemical CGU: the *Petroquímica Suape* and *Citepe* petrochemical plants;

iii) Transportation CGU: Transpetro's fleet of vessels;

iv) SIX CGU: shale processing plant; and

v) Other operations abroad defined as the smallest group of assets that generates independent cash flows.

### **Gas & Power CGU's:**

i) Natural gas CGU: comprised of natural gas pipelines, natural gas processing plants and fertilizers and nitrogen products plants. During the quarter ended December 31, 2014, after the interruption of the construction of the fertilizer plant *Unidade de Fertilizantes Nitrogenados III* (UFN III) (MS), the Company terminated the construction contract with *Consórcio UFN III* due to poor performance. After this interruption, the Company decided to re-evaluate its implementation schedule, postponing the necessary actions of hiring a new company to execute the remaining scope as long as measures to preserve the Company's capital are in place. In addition, during 2015, the updated 2015-2019 Business and Management Plan excluded the fertilizer plant *Unidade de Fertilizantes Nitrogenados V* (UFN V). As a result, the Company excluded the assets under construction UFN III and UFN V from

the Gas & Power CGU and each one was assessed for impairment separately;

ii) Power CGU: thermoelectric power generation plants; and

iii) Other operations abroad defined as the smallest group of assets that generates largely independent cash flows.

**Distribution CGU:** comprised of the distribution assets related to the operations of Petrobras Distribuidora S.A.

**Biofuels CGU (Biodiesel CGU):** an integrated unit of biodiesel plants defined based on the production planning and operation process, considering domestic market conditions, the production capacity of each plant, as well as the results of biofuels auctions and raw materials supply.

Investments in associates and joint ventures including goodwill are individually tested for impairment.

Notes 4.10 and 14 provide further detailed information about impairment.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **5.3. Pension and other post-retirement benefits**

The actuarial obligations and net expenses related to defined benefit pension and health care post-retirement plans are computed based on several financial and demographic assumptions, of which the most significant are:

- Discount rate: comprises the projected future inflation in addition to an equivalent real interest rate that matches the duration of the pension and health care obligations with the future yield curve of long-term Brazilian Government Bonds; and
- Medical costs: comprise the projected annual growth rates based on per capita health care benefits paid over the last five years, which are used as a basis for projections, converge to the general price inflation index within 30 years.

These and other estimates are reviewed at least annually and may differ materially from actual results due to changing market and financial conditions, as well as actual results of actuarial assumptions.

The sensitivity analysis of discount rates and changes in medical costs as well as additional information about actuarial assumptions are set out in note 22.

### **5.4. Estimates related to contingencies and legal proceedings**

The Company is a defendant in numerous legal proceedings involving tax, civil, labor, corporate and environmental issues arising from the normal course of its business for which it estimates the amounts of the obligations and the probability that an outflow of resources will be required. Those estimates are based on legal counsel and Management's best estimates.

Note 30 provides further detailed information about contingencies and legal proceedings.

### **5.5. Dismantling of areas and environmental remediation**

The Company has legal and constructive obligations to remove equipment and restore onshore and offshore areas at the end of operations at production sites. Its most significant asset removal obligations involve removal and disposal of offshore oil and gas production facilities in Brazil and abroad. Estimates of costs for future environmental cleanup and remediation activities are based on current information about costs and expected plans for remediation.

These estimates require performing complex calculations that involve significant judgment because the obligations are long-term; the contracts and regulations contain subjective



definitions of the removal and remediation practices and criteria involved when the events actually occur; and asset removal technologies and costs are constantly changing, along with regulations, environmental, safety and public relations considerations.

The Company is constantly conducting studies to incorporate technologies and procedures to optimize the operations of abandonment, considering industry best practices. However, the timing and amounts of future cash flows are subject to significant uncertainty.

Notes 4.13 and 20 provides further detailed information about the decommissioning provisions.

#### **5.6. Deferred income taxes**

The recognition of deferred tax liabilities and deferred tax assets involves significant estimates and judgments by the Company. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which a deductible temporary difference can be utilized or it is probable that the entity will have

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

sufficient taxable profit in future periods. Deferred tax liabilities are recognized for all taxable temporary differences.

In evaluating whether it will have sufficient taxable profit in future periods to support the recognition of deferred tax assets, the Company uses future projections and estimates based on its Business and Management Plan (BMP), approved by the Board of Directors annually. Future taxable profits projections are mainly based on the following assumptions: i) Brent crude oil prices; ii) foreign exchange rates; and iii) the Company's projected net finance expenses (income).

Changes in deferred tax assets and liabilities are presented in note 21.6.

### **5.7. Cash flow hedge accounting involving the Company's future exports**

For cash flow hedges, a forecast transaction that is the subject of the hedge must be highly probable. The Company determines the portion of its future exports that meet the criteria of being "highly probable future exports" by determining a percentage of total forecast exports based on a time series comparing realized and forecast exports (based on its five-year Business and Management Plan - BMP and its long-term Strategic Plan projections). Forecast future exports are reviewed whenever the Company reviews its BMP and Strategic Plan assumptions. The ratio of highly probable future exports to total forecast exports is reviewed annually, at least.

Projections of future exports are determined based on the Company's operational and capital expenditure optimization model and are affected by different assumptions, including crude oil and oil products prices, the Company's projected crude oil and natural gas production and domestic demand.

See note 33.2 for more detailed information about cash flow hedge accounting and a sensitivity analysis of the cash flow hedge involving future exports.

### **5.8. Write-off – overpayments incorrectly capitalized**

As described in note 3, in the third quarter of 2014, the Company wrote off US\$2,527 of capitalized costs representing the estimated amounts that Petrobras had overpaid for the acquisition of property, plant and equipment.

To account for these overpayments, the Company developed an estimation methodology, as set out in note 3. Petrobras acknowledges the degree of uncertainty involved in the estimation methodology and continues to monitor the ongoing investigations and the availability of other information concerning the amounts it may have overpaid in the context

of the payment scheme. If reliable information becomes available that indicates with sufficient precision that the Company's estimate should be modified, it will evaluate materiality and, if so, adjust.

However, as previously discussed, the Company believes it has used the most appropriate methodology and assumptions to determine the amounts of overpayments incorrectly capitalized and there is no evidence that would indicate the possibility of a material change in the amounts written-off.

#### **5.9. Allowance for impairment of trade receivables**

Management continuously assesses whether there is objective evidence that trade receivables are impaired and recognizes allowances for impairment of trade receivables to cover losses. Such evidence includes insolvency, defaults, judicial recovery claims, a significant probability of a debtor filing for bankruptcy and others.

See note 8 for more detailed information about allowance for impairment of trade receivables.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***6. New standards and interpretations****a) IASB - International Accounting Standards Board**

The main standards and amendments to standards issued by the IASB and not effective as of December 31, 2015 are set out following. The Company did not early adopt those standards:

<b>Standards</b>	<b>Brief Description</b>	<b>Effective Date</b>
Amendment to IFRS 11 "Joint Arrangements"	Requires an investor to apply the principles of business combination accounting when it acquires an interest in a joint operation (as defined under IFRS 11) that constitutes a "business (as defined under IFRS 3)."	January 1, 2016
Amendment to IFRS 10 "Consolidated Financial Statements" and to IAS 28 "Investments in Associates and Joint Ventures"	States that when an asset is sold to, or contributed in an associate or a joint venture, and the asset meets the definition of business (IFRS 3), the gain or loss shall be fully recognized by the investor (regardless of the participation of third parties in the associate or joint venture). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business. However, if the sale or contribution does not meet the definition of business as defined by IFRS 3/CPC 15, any gain or loss shall be recognized by the investor in proportion to the participation of third parties in the associate or joint venture.	Indefinitely postponed
IFRS 15 – "Revenue from Contracts with Customers"	Sets out requirements for revenue recognition, measurement and disclosure. According to IFRS 15, revenue is recognized when a customer obtains control of a good or service sold. It changes the current model, based on which revenue is recognized when significant risks and rewards of ownership are transferred. In addition IFRS 15 provides guidance for revenue recognition in more complex cases.	January 1, 2018
IFRS 9 - "Financial Instruments"	Establishes a new model of financial assets classification, based on their cash flow characteristics and entity's business model	January 1, 2018

objective for them. This standard also changes the assumptions of financial assets impairment recognition based on expected losses.

Adds new requirements regarding hedge accounting.

The Company is assessing the possible impact the new standards and amendments to standards may have on future periods.

### **IFRS 16 – “Leases”**

On January 13, 2016, the IASB issued IFRS 16 "Leases", which will be effective for fiscal years beginning on or after January 1, 2019, and will replace IAS 17 "Leases" and related interpretations.

IFRS 16 sets out requirements for leases identification, recognition, measurement, presentation and disclosure according to the lessee and lessor perspectives.

Among the changes for lessees, IFRS 16 eliminates classification between financial and operating leases, required by IAS 17. Therefore, it will be a single model in which all leases will result in the recognition of assets related to the use of rights of assets leased. If the payments provided for in the commercial lease are due over time, financial liabilities should be recognized as well.

For lessors, IFRS 16 will maintain the classification as either financial or operating leases as required by IAS 17. IFRS 16 will not substantially change the way leases will be accounted for lessors when compared to IAS 17.

The Company is assessing the impacts of this new standard and believes that the adoption of IFRS 16 may cause a significant increase in assets and liabilities presented in its consolidated statement of financial position. Accordingly, the Company may also need to negotiate some covenants in its loan agreements with BNDES – (Brazilian Development Bank) when a reliable estimate of these impacts can be made.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***b) Brazilian tax law**

On December 30, 2015, the State of Rio de Janeiro enacted two laws that increase the tax burden on the oil industry, from March 2016, as follows:

- Law 7.182 – establishes a new levy for the Rate Control, Monitoring and Supervision of Research, Mining, Oil and Gas Exploration and Utilization Activities (*Taxa de Controle, Monitoramento e Fiscalização das Atividades de Pesquisa, Lavra, Exploração e Aproveitamento de Petróleo e Gás* – TFPG), over each barrel of crude oil or equivalent unit of natural gas extracted in the State of Rio de Janeiro; and
- Law 7.183 – establishes a new tax charge on transactions involving the crude oil cycle - 18% VAT (ICMS).

The Company believes that neither of these laws have a basis as valid legal statutes and plans to file appeals to the Brazilian Federal Supreme Court to prove that they are unconstitutional.

**7. Cash and cash equivalents and Marketable securities****Cash and cash equivalents**

	<b>12.31.2015</b>	<b>12.31.2014</b>
Cash at bank and in hand	808	709
Short-term financial investments		
- In Brazil		
Single-member funds (Interbank Deposit) and other short-term deposits	922	1,999
Other investment funds	11	41
	933	2,040
- Abroad		
Time deposits	13,276	8,700
Automatic investing accounts and interest checking accounts	8,828	3,573
Other financial investments	1,213	1,633
	23,317	13,906
Total short-term financial investments	24,250	15,946
Total cash and cash equivalents	25,058	16,655

Short-term financial investments in Brazil comprise highly-liquid investments in exclusive (single-member) funds, mainly holding Brazilian Federal Government Bonds. Short-term financial investments abroad are comprised of time deposits, highly-liquid automatic investing accounts, interest checking accounts and other short-term fixed income instruments with maturities of three months or less.

### Marketable securities

	12.31.2015			12.31.2014		
	In Brazil	Abroad	Total	In Brazil	Abroad	Total
Trading securities	779	—	779	2,690	—	2,690
Available-for-sale securities	5	1	6	2	19	21
Held-to-maturity securities	69	14	83	102	6,619	6,721
	853	15	868	2,794	6,638	9,432
Current	779	1	780	2,690	6,633	9,323
Non-current	74	14	88	104	5	109

Trading securities refer mainly to investments in Brazilian Federal Government Bonds and held-to-maturity securities are mainly comprised of time deposits with highly-rated financial institutions abroad. These financial investments have maturities of more than three months and are classified as current assets due to their maturity or the expectation of their realization in the short term.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***8. Trade and other receivables****8.1. Trade and other receivables, net**

Trade receivables	<b>12.31.2015</b>	<b>12.31.2014</b>
Third parties (*)	7,262	10,022
Related parties		
Investees (19.1)	533	863
Receivables from the electricity sector (note 8.4)	3,415	2,966
Petroleum and alcohol accounts -Federal Government (note 19.2)	219	317
Other receivables	1,699	2,005
	13,128	16,173
Allowance for impairment of trade receivables	(3,656)	(3,372)
	9,472	12,801
Current	5,803	7,969
Non-current	3,669	4,832

(\*) As of December 31, 2014, US\$ 605 were reclassified as set out in note 2.3.

**8.2. Trade receivables overdue - Third parties**

	<b>2015</b>	<b>2014</b>
Up to 3 months	315	823
From 3 to 6 months	180	178
From 6 to 12 months	803	181
More than 12 months	1,735	1,832
	3,033	3,014

**8.3. Changes in the allowance for impairment of trade receivables**

<b>12.31.2015</b>	<b>12.31.2014</b>
-------------------	-------------------



Opening balance	3,372	1,406
Additions (*)	2,060	2,484
Write-offs	(17)	(2)
Reversals	(788)	(128)
Cumulative translation adjustment	(971)	(388)
Closing balance	3,656	3,372
Current	1,690	1,448
Non-current	1,966	1,924

(\*)In 2015, includes additions related to: electricity sector US\$ 1,218 (note 8.4) , losses on fines US\$ 374 (note 25) and thermal interconnected system US\$70.

F-33

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***8.4. Trade receivables – electricity sector (isolated electricity system in the northern region of Brazil)**

<b>Allowance for impairment of trade receivables</b>									
<b>Related parties (Eletrobras Group)</b>	<b>As of 12.31.2014</b>	<b>Amounts</b>				<b>Transfers</b>	<b>Inflation</b>	<b>CTA</b>	<b>As of 12.31.2014</b>
		<b>Sales</b>	<b>received</b>	<b>Recognition</b>	<b>Reversals</b>	<b>(*)</b>	<b>indexation</b>		
Amazonas Distribuidora De Energia Centrais Elétricas do Norte	1,989	796	(662)	(431)	90	654	307	(747)	1,100
Centrais Elétricas de Rondônia	48	77	(114)	–	–	–	–	(10)	100
Others	471	407	(226)	(274)	14	–	37	(144)	280
Trade receivables, net - Eletrobras Group	130	108	(64)	(81)	6	–	15	(39)	75
<b>Third parties</b>	<b>2,638</b>	<b>1,388</b>	<b>(1,066)</b>	<b>(786)</b>	<b>110</b>	<b>654</b>	<b>359</b>	<b>(940)</b>	<b>2,100</b>
Cigás Centrais Elétricas do Pará Cia de Eletricidade do Amapá Cia de Energia de Pernambuco - CELPE	427	714	(437)	(290)	459	(654)	36	(112)	140
Others	35	211	(230)	(42)	59	–	4	(11)	260
Trade receivables, net - Third parties	–	65	(27)	(89)	14	–	47	(1)	90
	–	95	(93)	–	–	–	–	–	20
	6	90	(88)	(11)	12	–	–	(3)	60
	468	1,175	(875)	(432)	544	(654)	87	(127)	180

Trades receivables, net - Total	3,106	2,563 (1,941)	(1,218)	654	–	446	(1,067)2,
Trade receivables - Eletrobras Group	2,966	1,388 (1,066)	–	–	956	359	(1,188)3,
(-) Allowance for impairment of trade receivables	(328)	– –	(786)	110	(302)	–	248 (1
Trade receivables, net - Eletrobras Group	2,638	1,388 (1,066)	(786)	110	654	359	(940) 2,
Trade receivables - Third parties	1,851	1,175 (875)	–	–	(956)	87	(509) 77
(-) Allowance for impairment of trade receivables	(1,383)	– –	(432)	544	302	–	382 (5
Trade receivables, net - Third parties	468	1,175 (875)	(432)	544	(654)	87	(127) 18
Trades receivables - Total	4,817	2,563 (1,941)	–	–	–	446	(1,697)4,
(-) Allowance for impairment of trade receivables	(1,711)	– –	(1,218)	654	–	–	630 (1
Trades receivables, net - Total	3,106	2,563 (1,941)	(1,218)	654	–	446	(1,067)2,

(\*) Cigás assigned receivables from Amazonas Distribuidora de Energia to Petrobras, pursuant to the and sale agreement, which establishes that overdue payables from Cigás to Petrobras can be transferred to Amazonas Distribuidora de Energia when certain conditions are met.

As of December 31, 2015, US\$ 1,919 of the Company's net trade receivables from the isolated electricity system in the northern region of Brazil, related to the sale of fuel oil, natural gas, electricity and other products to thermoelectric power plants (which are subsidiaries of Eletrobras), state-owned natural gas distribution companies and independent

electricity producers (*Produtores Independentes de Energia – PIE*) operating in that region, are classified as non-current assets. The balance of those receivables was US\$ 2,543 as of December 31, 2015 (US\$ 3,106 as of December 31, 2014).

A significant portion of the funds used by those companies to pay for products supplied by the Company came from the Fuel Consumption Account (*Conta de Consumo de Combustível – CCC*), which provides funds to cover a portion of the costs related to the supply of fuel to thermoelectric power plants located in the northern region of Brazil (operating in the isolated electricity system). However, as a result of changes in the CCC regulations over time, funds transferred from the CCC to these electricity companies have not been sufficient for them to meet their financial obligations and, as a result, some have experienced financial difficulties and have not been able to pay for the products supplied by Petrobras.

In 2013, a new legislation significantly changed the sources of funds that were used to cover the cost of electricity generated in the Isolated Electricity System and the Brazilian Federal Government started to provide funds to cover costs that in the past were only borne by the CCC. This assistance from the Federal Government would be made available through funds deposited in the Energy Development Account (*Conta de Desenvolvimento*

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

*Energético – CDE*) by the Brazilian National Treasury. Those funds, however, proved to be insufficient to cover the operational costs of the isolated electricity system in the northern region of Brazil.

The funds available in the CCC, which were already insufficient to cover the costs related to fuel supplied by the Company, decreased significantly. Following an increase in the amounts owed by the thermoelectric power plants operating in the Isolated Electricity System, the Company put pressure on the negotiations with the state-owned natural gas distribution companies, the independent electricity producers (*PIEs*), subsidiaries of Eletrobras and other private companies. On December 31, 2014, the Company entered into a debt acknowledgement agreement with subsidiaries of Eletrobras with respect to the balance of its receivables as of November 30, 2014. Eletrobras acknowledged it owed US\$ 2,202 to the Company. This amount is being adjusted monthly based on the Selic interest rate (Brazilian short-term interest rate). Under this agreement, the first of 120 monthly installments was paid in February 2015 and, as of May 7, 2015, US\$ 1,889 had been guaranteed by the collateralization of certain amounts payable by the *CDE* to the CCC. This debt acknowledgement agreement is not overdue as of December 31, 2015.

In 2015, the Brazilian government reviewed its electricity price regulations and implemented a new pricing policy for the electricity sector, which has already resulted in increases in the tariffs charged to end customers beginning in the first quarter of 2015. The Company had expected that this new policy would have strengthened the financial situation of the companies in the electricity sector and, consequently to reduce the balance of their accounts payable with respect to fuel oil and other products supplied by the Company, which has not occurred. Due to the time required for increasing the amount of electricity tariffs from end-users of electricity distributors in order to provide financial stability of these companies, the recovery flow of CCC funds is occurring slowly, which is delaying the reimbursements for fuel acquisition costs provided by Petrobras and deteriorating the default of those customers.

Pursuant to the issuance of Normative Instruction 679 on September 1, 2015 by the Brazilian National Electricity Agency (*Agência Nacional de Energia Elétrica - ANEEL*), the Company expected that the flow of funds it would receive from the CCC would accelerate. This is because funds would be paid directly from the CCC for products supplied in the prior month with a limit of 75% of the average payments made by the CCC in the previous three months. However, it has not occurred and, as a consequence, the insolvency of these receivables increased. However, recent experience has shown that the Company's expectations have been frustrated and, as a consequence, these receivables continue to be delinquent.

As the Brazilian government had authorized a renegotiation of *CDE's* debt with companies that are CCC creditors, the Company expected to enter into additional debt acknowledgement agreements and pledge additional *CDE* credits as collateral for overdue receivables with

respect to products supplied between December 1, 2014 and June 30, 2015. However, as the ongoing negotiation of those debt acknowledgement agreements has not been concluded, the Company recognized an allowance for impairment of those receivables in the amount of US\$ 682 in the quarter ended December 31, 2015.

As a result, and based on Management's evaluation, the Company has recognized US\$ 564 (US\$ 1,696 in 2014) as selling expenses during 2015:

- an allowance for impairment of trade receivables in the amount of US\$ 1,218, including US\$ 682 with respect to the debt acknowledgement agreement negotiation described above with respect to uncollateralized receivables outstanding as of December 31, 2015; and
- a reversal of allowance for impairment of trade receivables in the amount of US\$ 654 as a result of the pledge of additional receivables from the CDE on May 7, 2015 and from restricted funds deposited in an escrow account.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The Company continues to negotiate additional collaterals with Eletrobras and has implemented procedures to avoid additional defaults, by requiring prepayments for supplying products, except for customers holding legal injunctions that forbid the Company to require prepayments, for example.

**9. Inventories**

	<b>12.31.2015</b>	<b>12.31.2014</b>
Crude oil	2,895	3,977
Oil products	2,206	4,333
Intermediate products	612	854
Natural gas and LNG (*)	253	358
Biofuels	158	150
Fertilizers	61	34
	6,185	9,706
Materials, supplies and others	1,272	1,806
	7,457	11,512
Current	7,441	11,466
Non-current	16	46

(\*) Liquid natural gas

Inventories are presented net of a US\$ 155 allowance reducing inventories to net realizable value (US\$ 150 as of December 31, 2014), mainly due to the decrease in international prices of crude oil and oil products. In 2015, the Company recognized as cost of sales a US\$ 430 allowance charge reducing inventories to net realizable value (US\$ 1,015 in 2014).

A portion of the crude oil and/or oil products inventories have been pledged as security for the Terms of Financial Commitment (TFC) signed by Petrobras and Petros in the amount of US\$ 1,719 (US\$ 2,316 as of December 31, 2014), as set out in note 22.1.

**10. Disposal of assets and legal mergers****10.1. Disposal of assets****Disposal of assets in Argentina**

On March 30, 2015, Petrobras Argentina S.A., PESA, disposed of its interest in assets located in the Austral Basin in Santa Cruz to Compañía General de Combustibles S.A. (CGC) for a lump-sum payment of US\$ 101 made on the same date. The Company recognized a US\$ 77 gain in other income.

### **Innova S.A.**

On August 16, 2013, the Board of Directors of Petrobras approved the disposal of 100% of the share capital of Innova S.A. for US\$ 369 to Videolar S.A. and its major shareholder, subject to certain condition precedent, including approval by the Brazilian Antitrust Regulator (*Conselho Administrativo de Defesa Econômica – CADE*).

On October 30, 2014 the transaction was concluded in accordance with in the sales and purchase agreement and a US\$ 57 gain was recognized in other income.

On March 31, 2015, a final price adjustment was agreed and the Company received an additional of US\$ 78 recorded in other income.

### **Disposal of Gaspetro equity interest**

On December 28, 2015, Petrobras concluded the disposal of 49% equity interest in its subsidiary Petrobras Gas S.A. (Gaspetro) to Mitsui Gás e Energia do Brasil Ltda (Mitsui-Gás).



## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Mitsui Gas paid US\$ 495 in a single installment after the fulfillment of all precedent conditions in the sales and purchase agreement signed on October 23, 2015, including the unrestricted final approval by the Brazilian Antitrust Regulator (Conselho Administrativo de Defesa Econômica - CADE). This disposal did not result in loss of control of Gaspetro, therefore US\$ 257 (US\$ 170 net of taxes) was recognized as an adjustment directly to equity.

Although the Company has been cited in certain lawsuits concerning this transaction, there is no indication to date that circumstances may affect the disposal and the Company is preparing its legal defense.

### **10.2. Legal mergers**

On January 30, 2015, the Shareholders' Extraordinary General Meeting of Petrobras approved the mergers of Arembepe Energia S.A. and Energética Camaçari Muricy S.A. into Petrobras.

The objective of these mergers is to simplify the corporate structure of the Company, reduce costs and capture synergies. These mergers did not affect share capital or the Company's consolidated financial statements.

### **10.3. Assets classified as held for sale**

As of December 31, 2015, the Company classified US\$ 152 as assets held for sale (US\$ 5 in 2014) including US\$ 150 related to the Bijupirá and Salema production fields and US\$ 2 regarding PI, PIII and PIV drilling rigs (US\$ 5 in 2014). In addition, the amount of US\$ 125 classified as liabilities refers to decommissioning costs directly associated to the Bijupirá and Salema fields.

The Company tested these assets for impairment and recognized impairment losses as set out in note 14.3.

On February 26, 2016, the sales contracts of Bijupirá and Salema were terminated as set out in note 35. Accordingly, the amounts regarding these fields will be reclassified to property, plant and equipment, and to provision for decommissioning costs in 2016.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***11. Investments****11.1. Information about direct subsidiaries, joint arrangements and associates**

<b>Subsidiaries</b>	<b>Main business segment</b>	<b>% Petrobras' ownership</b>	<b>% Petrobras' voting rights</b>	<b>Shareholders' equity (deficit)</b>	<b>Net income (loss) for the year</b>	<b>Country</b>
Petrobras Netherlands B.V. - PNBV (i)	E&P	100.00	100.00	20,035	(1,017)	Netherlan
Petrobras Distribuidora S.A. - BR	Distribution	100.00	100.00	2,542	(348)	Brazil
Petrobras International Braspetro - PIB BV (i) (ii)	Several segments (iii)	99.98	99.98	2,003	(643)	Netherlan
Petrobras Transporte S.A. - Transpetro	RT&M	100.00	100.00	1,359	310	Brazil
Petrobras Logística de Exploração e Produção S.A. - PB-LOG	E&P	100.00	100.00	893	232	Brazil
Petrobras Transportadora Associada de Gás S.A. - TAG	Gas & Power	100.00	100.00	832	(738)	Brazil
Petrobras Gás S.A. - Gaspetro	Gas & Power	51.00	51.00	478	147	Brazil
Petrobras Biocombustível S.A. - PBIO	Biofuels	100.00	100.00	288	(258)	Brazil
Petrobras Logística de Gás - Logigás	Gas & Power	100.00	100.00	282	13	Brazil
Petrobras Liquegás Distribuidora S.A. - Araucária	RT&M	100.00	100.00	241	34	Brazil
Petrobras Nitrogenados S.A.	Gas & Power	100.00	100.00	216	24	Brazil
Petrobras Termomacaé Ltda.	Gas & Power	99.99	99.99	184	45	Brazil

Braspetro Oil Services Company - Brasoil (i)	Corporate	100.00	100.00	160	10	Cayman Islands
Breitener Energética S.A. Companhia Integrada Têxtil de Pernambuco S.A. - CITEPE	Gas & Power	93.66	93.66	166	26	Brazil
Termobahia S.A. Companhia Petroquímica de Pernambuco S.A. - PetroquímicaSuape	RT&M	100.00	100.00	145	(246)	Brazil
Baixada Santista Energia S.A. Petrobras Comercializadora de Energia Ltda. - PBEN	Gas & Power	98.85	98.85	124	25	Brazil
Fundo de Investimento Imobiliário RB Logística - FII Petrobras Negócios Eletrônicos S.A. - E-Petro	RT&M	100.00	100.00	103	(243)	Brazil
Termomacaé Comercializadora de Energia Ltda 5283 Participações Ltda.	Gas & Power	100.00	100.00	75	7	Brazil
Downstream Participações Ltda.	Gas & Power	99.91	99.91	26	8	Brazil
<b>Joint operations</b>						
Fábrica Carioca de Catalizadores S.A. - FCC	E&P	99.00	99.00	17	(19)	Brazil
Ibiritermo S.A.	Corporate	99.95	99.95	8	1	Brazil
	Gas & Power	100.00	100.00	4	2	Brazil
	Corporate	100.00	100.00	–	103	Brazil
	Corporate	99.99	99.99	(1)	–	Brazil
<b>Entities that are not consolidated</b>						
<b>Joint ventures</b>						
Logum Logística S.A.	RT&M	20.00	20.00	81	(65)	Brazil
Cia Energética Manauara S.A. Petrocoque S.A. Indústria e Comércio Refinaria de Petróleo	Gas & Power	40.00	40.00	38	10	Brazil
	RT&M	50.00	50.00	35	10	Brazil
	RT&M	33.20	33.33	23	5	Brazil

Riograndense S.A. Brasympe Energia S.A.	Gas & Power	20.00	20.00	20	2	Brazil
Brentech Energia S.A.	Gas & Power	30.00	30.00	20	3	Brazil
Metanol do Nordeste S.A. - Metanor	RT&M	34.54	34.54	13	(1)	Brazil
Eólica Mangue Seco 4 - Geradora e Comercializadora de Energia Elétrica S.A.	Gas & Power	49.00	49.00	11	1	Brazil
Eólica Mangue Seco 3 - Geradora e Comercializadora de Energia Elétrica S.A.	Gas & Power	49.00	49.00	10	—	Brazil
Eólica Mangue Seco 1 - Geradora e Comercializadora de Energia Elétrica S.A.	Gas & Power	49.00	49.00	9	—	Brazil
Eólica Mangue Seco 2 - Geradora e Comercializadora de Energia Elétrica S.A.	Gas & Power	51.00	51.00	9	—	Brazil
Companhia de Coque Calcinado de Petróleo S.A. - Coquepar	RT&M	45.00	45.00	2	—	Brazil
Participações em Complexos Bioenergéticos S.A. - PCBIOS	Biofuels	50.00	50.00	—	—	Brazil
<b>Associates</b>						
Sete Brasil Participações S.A.	E&P	5.00	5.00	887	(1,485)	Brazil
Fundo de Investimento em Participações de Sondas - FIP Sondas	E&P	4.59	4.59	867	(1,886)	Brazil
Braskem S.A.	RT&M	36.20	47.03	518	943	Brazil
UEG Araucária Ltda.	Gas & Power	20.00	20.00	220	73	Brazil
Deten Química S.A.	RT&M	27.88	27.88	88	31	Brazil
Energética SUAPE II Termoelétrica	Gas & Power	20.00	20.00	60	26	Brazil
Potiguar S.A. - TEP	Gas & Power	20.00	20.00	17	1	Brazil
Nitroclor Ltda.	RT&M	38.80	38.80	—	—	Brazil
	Gas & Power	30.00	30.00	—	—	Brazil

Bioenergética  
Britarumã S.A.

- (i) Companies abroad with financial statements prepared in foreign currencies.
- (ii) 5283 Participações Ltda holds an 0.0187% interest (an 11.88% interest in 2014, diluted by Petrobras' investments).
- (iii) Cover activities abroad in E&P, RTM, Gas & Power and Distribution segments.

F-38

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***11.2. Investments in associates and joint ventures**

	<b>Balance at</b>		<b>Restructuring,</b>	<b>Share of</b>	<b>Cumulative</b>	<b>Other</b>
	<b>12.31.2014</b>	<b>Investments</b>	<b>capital</b>	<b>profits of</b>	<b>translation</b>	<b>comprehens</b>
			<b>decrease and</b>	<b>investments</b>	<b>adjustment</b>	<b>income</b>
			<b>others</b>			
Petrobras Oil & Gas B.V. - PO&G	1,714	—	—	(32)	63	(104)
Braskem S.A.	1,711	—	—	317	(458)	(658)
State-controlled natural gas distributors	340	—	—	54	(109)	—
Investees in Venezuela	312	—	—	(101)	19	(12)
Guarani S.A.	518	—	—	(66)	(169)	(84)
Nova Fronteira Bionergia	163	—	—	9	(53)	—
Other petrochemical investees	66	—	—	12	(22)	—
Compañía Mega S.A. - MEGA	31	9	—	27	(22)	—
Compañía de Inversiones de Energia S.A. - CIESA	68	—	—	(3)	(21)	—
UEG Araucária Sete Brasil	73	8	—	1	(20)	—
Participações FIP - Sondas	144	24	—	(107)	(55)	(4)
FIP - Sondas	137	21	—	(111)	(43)	—
Other associates	459	46	7	(177)	(107)	1
Other investees	17	—	—	—	(5)	—
	5,753	108	7	(177)	(1,002)	(861)

During 2015, losses of US\$ 326 were recognized as part of the share of losses in equity-accounted investments with respect to the Company's investment in Sete Brasil and FIP Sondas. A portion of those losses is attributable to the impairment loss the Company recognized in its investments, as set out in note 14.2.2.

Those losses resulted from the worsening economic and financial conditions of Sete Brasil Participações S.A., along with the postponement of a majority of its construction projects and uncertainties about its ability to continue the projects.

### 11.3. Investments in listed companies

Company	Thousand-share lot			Quoted stock exchange prices (US\$ per share)		Market value	
	12.31.2015	12.31.2014	Type	12.31.2015	12.31.2014	12.31.2015	12.31.2014
<b>Indirect subsidiary</b>							
Petrobras Argentina S.A.	1,356,792	1,356,792	Common	0.61	0.65	827	879
						827	879
<b>Associate</b>							
Braskem S.A.	212,427	212,427	Common	4.07	4.07	866	864
Braskem S.A.	75,793	75,793	Preferred A	7.07	6.59	536	499
						1,402	1,363

The market value of these shares does not necessarily reflect the realizable value upon sale of a large block of shares.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***11.4. Non-controlling interest**

The total amount of non-controlling interest on December 31, 2015 is US\$ 819 (US\$ 706 in 2014), of which US\$ 367 is related to Petrobras Argentina S.A. and US\$ 234 is related to non-controlling interest of Gaspetro.

Condensed financial information is set out as follows:

	<b>Petrobras Argentina S.A.</b>		<b>Gaspetro</b>
	<b>2015</b>	<b>2014</b>	<b>2015</b>
Current assets	795	1,008	81
Long-term receivables	72	83	59
Investments	276	408	303
Property, plant and equipment	1,084	1,355	1
Other non-current assets	3	2	80
	2,230	2,856	524
Current liabilities	541	689	18
Non-current liabilities	571	692	27
Shareholders' equity	1,118	1,475	479
	2,230	2,856	524
Sales revenues	243	145	208
Net income	119	43	147
Increase (decrease) in cash and cash equivalents	71	118	(165)

Petrobras Argentina S.A. is an integrated energy company, indirectly controlled by Petrobras (directly controlled by PIB BV, which holds a 67.19% interest in this company) and its main place of business is Argentina.

Gaspetro, a Petrobras' subsidiary, holds interests in several state distributors of natural gas in Brazil. Petrobras concluded the sale of 49% of its interest in Gaspetro on December 28, 2015 as set out in note 10.1.

**11.5. Summarized information on joint ventures and associates**

The Company invests in joint ventures and associates in Brazil and abroad, whose activities are related to petrochemical companies, gas distributors, biofuels, thermoelectric power



plants, refineries and other activities. Condensed financial information is set out below:

	<b>2015</b>			<b>Associates</b>		<b>2014</b>			<b>Associates</b>	
	<b>Joint ventures</b>		<b>Other</b>			<b>Joint ventures</b>		<b>Other</b>		
	<b>In Brazil</b>	<b>PO&amp;G (*)</b>	<b>abroad</b>	<b>In Brazil</b>	<b>Abroad</b>	<b>In Brazil</b>	<b>PO&amp;G (*)</b>	<b>abroad</b>	<b>In Brazil</b>	<b>Abroad</b>
Current assets	1,106	934	327	5,358	2,240	1,474	1,033	314	10,701	2,241
Non-current assets	343	50	21	2,697	199	438	17	23	2,695	210
Property, plant and equipment	1,206	2,790	488	9,599	1,815	1,598	2,527	487	12,207	3,600
Other non-current assets	554	4	4	2,831	78	753	14	4	4,342	79
	3,209	3,778	840	20,485	4,332	4,263	3,591	828	29,945	6,130
Current liabilities	1,331	228	213	4,880	3,607	1,841	288	215	6,795	3,482
Non-current liabilities	640	1,327	303	12,522	1,057	732	1,134	304	13,425	992
Shareholders' equity	1,108	2,223	178	3,268	(332)	1,681	2,169	159	9,779	1,656
Non-controlling interest	130	—	146	(185)	—	9	—	150	(55)	—
	3,209	3,778	840	20,485	4,332	4,263	3,591	828	29,945	6,130
Sales revenues	3,825	1,928	284	15,805	167	5,583	2,175	316	22,540	189
Net Income (loss) for the year	155	209	47	1,036	(1,398)	144	236	16	769	331
Ownership interest - %	20 to 83%	50%	34 to 50%	5 to 49%	11 to 49%	20 to 83%	50%	34 to 50%	5 to 49%	11 to 49%

(\*) Petrobras Oil & Gas (PO&G) is a joint venture located in the Netherlands, with 50% share of Petrobras International BV (PIBBV), for exploration and oil and gas production in Africa.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***12. Property, plant and equipment****12.1. By class of assets**

	<b>Land, buildings and improvement</b>	<b>Equipment and other assets</b>	<b>Assets under construction (* )</b>	<b>Exploration and development costs (Oil and gas producing properties)</b>	<b>Total</b>
Balance at January 1, 2014	7,868	90,405	79,758	49,870	227,901
Additions	30	2,031	30,362	580	33,003
Additions to / review of estimates of decommissioning costs	–	–	–	1,999	1,999
Capitalized borrowing costs	–	–	3,592	–	3,592
Write-offs	(9)	(57)	(4,024)	(196)	(4,286)
Write-off - overpayments incorrectly capitalized (note 3)	(35)	(1,160)	(1,078)	(91)	(2,364)
Transfers (***)	2,685	25,371	(36,178)	23,078	14,956
Depreciation, amortization and depletion	(534)	(7,381)	–	(4,888)	(12,803)
Impairment recognition	(899)	(1,398)	(11,670)	(2,839)	(16,806)
Impairment reversal	–	17	–	3	20
Cumulative translation adjustment	(1,071)	(9,832)	(7,819)	(7,760)	(26,482)
Balance at December 31, 2014	8,035	97,996	52,943	59,756	218,730
Cost	10,979	142,030	52,943	88,023	293,975
Accumulated depreciation, amortization and	(2,944)	(44,034)	–	(28,267)	(75,245)

depletion					
Balance at December 31, 2014	8,035	97,996	52,943	59,756	218,730
Additions	210	1,296	18,349	512	20,367
Additions to / review of estimates of decommissioning costs	—	—	—	4,147	4,147
Capitalized borrowing costs	—	—	1,768	—	1,768
Write-offs	(8)	(56)	(1,797)	(407)	(2,268)
Transfers	1,153	8,726	(16,477)	8,468	1,870
Depreciation, amortization and depletion	(468)	(6,374)	—	(4,596)	(11,438)
Impairment recognition (Note 14)	(238)	(3,837)	(3,008)	(5,220)	(12,303)
Impairment reversal	—	11	5	23	39
Cumulative translation adjustment	(2,584)	(23,869)	(14,173)	(18,989)	(59,615)
Balance at December 31, 2015	6,100	73,893	37,610	43,694	161,297
Cost	8,595	112,307	37,610	67,220	225,732
Accumulated depreciation, amortization and depletion	(2,495)	(38,414)	—	(23,526)	(64,435)
Balance at December 31, 2015	6,100	73,893	37,610	43,694	161,297
Weighted average of useful life in years	40	20			
	(25 to 50 )	(3 to 31)		Units of production method	
	(except land)	(**)			

(\*) See note 29 for assets under construction by business area

(\*\*) Includes exploration and production assets depreciated based on the units of production method.

(\*\*\*) Includes US\$ 10,446 reclassified from Intangible Assets to Property, Plant and Equipment in 2014, as a result of the declaration of commerciality of areas of the Assignment Agreement

As of December 31, 2015, property, plant and equipment includes assets under finance leases of US\$ 48 (US\$ 72 as of December 31, 2014).

## 12.2. Estimated useful life

Buildings and improvements, equipment and other assets	Cost	Accumulated depreciation	Balance at 2015
--	------	--------------------------	-----------------

<b>Estimated useful life</b>			
5 years or less	3,407	(2,289)	1,118
6 - 10 years	8,247	(4,110)	4,137
11 - 15 years	1,018	(543)	475
16 - 20 years	33,420	(10,136)	23,284
21 - 25 years	17,887	(5,631)	12,256
25 - 30 years	14,532	(3,158)	11,374
30 years or more	22,478	(5,293)	17,185
Units of production method	19,512	(9,748)	9,764
	120,501	(40,908)	79,593
Buildings and improvements	8,194	(2,494)	5,700
Equipment and other assets	112,307	(38,414)	73,893

### **12.3. Concession for exploration of oil and natural gas - Assignment Agreement (“Cessão Onerosa”)**

Petrobras, the Brazilian Federal Government (assignor) and the Brazilian Agency of Petroleum, Natural Gas and Biofuels (Agência Nacional de Petróleo, Gás Natural e Biocombustíveis) - ANP (regulator and inspector) entered into the Assignment Agreement in 2010, which grants the Company the right to carry out prospection and drilling

F-41

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

activities for oil, natural gas and other liquid hydrocarbons located in six blocks in the pre-salt area (Franco, Florim, Nordeste de Tupi, Entorno de Iara, Sul de Guar and Sul de Tupi), limited to the production of five billion barrels of oil equivalent in up to 40 years and renewable for a further 5 years subject to certain conditions.

The agreement establishes that the review procedures, which must be based on independent technical appraisal reports, will commence immediately after the declaration of commerciality for each area. Currently, after the declarations of commerciality of the six blocks, all the Assignment Agreement areas were included in the review procedures. The review of the Assignment Agreement will be concluded after the review of all the areas. However, no specific date has been established for the review procedures to be concluded.

The formal review procedures for each block are based on costs incurred through the exploration stage and estimated costs and production levels included in the independent technical appraisal reports. The review of the Assignment Agreement may result in modifications to: (i) local content requirements and commitments; (ii) total volume (in barrels of oil) to be produced; (iii) term of the agreement and (iv) the minimum percentages of local content.

If the review of the Assignment Agreement determines that the value of acquired rights is greater than initially paid, the Company may be required to pay the difference to the Federal Government, or may proportionally reduce the total volume of barrels acquired under the agreement. If the review determines that the value of the acquired rights is lower than initially paid by the Company, the Federal Government will reimburse the Company for the difference by delivering cash or bonds, subject to budgetary regulations.

Currently, the Assignment Agreement is being reviewed, including the preparation of the independent technical appraisal reports and related discussions with the Brazilian Federal Government. The Company will make the respective adjustments to the purchase prices of the rights according to the conclusion of the review.

As of December 31, 2015, the Company’s property, plant and equipment include US\$ 19,158 (US\$ 28,164 as of December 31, 2014) related to the Assignment Agreement.

### **12.4. Oil and Gas fields operated by Petrobras returned to ANP**

During 2015 the following oil and gas fields were returned to ANP: Itaparica, Camaçari, Carapic, Bana Sul, Salema Branca, Nordeste Namorado, part of Rio Preto, Pirapitanga, Piracuc, Catu and part of Mangang. These fields were returned to ANP mainly due to their uneconomic feasibility and, as a consequence, the Company wrote off an amount of US\$ 264 as other expenses.

F-42

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***13. Intangible assets****13.1. By class of assets**

	<b>Rights and Concessions</b>	<b>Software Acquired</b>	<b>Developed in-house</b>	<b>Goodwill</b>	<b>Total</b>
Balance at January 1, 2014	14,381	142	496	400	15,419
Addition	92	41	118	–	251
Capitalized borrowing costs	–	–	8	–	8
Write-offs	(93)	(5)	(10)	–	(108)
Transfers (**)	(10,346)	7	9	(1)	(10,331)
Amortization	(35)	(54)	(131)	–	(220)
Impairment recognition	(8)	–	–	–	(8)
Impairment reversal	6	–	–	–	6
Cumulative translation adjustment	(405)	(12)	(58)	(33)	(508)
Balance at December 31, 2014	3,592	119	432	366	4,509
Cost	4,003	578	1,281	366	6,228
Accumulated amortization	(411)	(459)	(849)	–	(1,719)
Balance at December 31, 2014	3,592	119	432	366	4,509
Addition	17	22	78	–	117
Capitalized borrowing costs	–	–	5	–	5
Write-offs	(163)	–	(2)	–	(165)
Transfers	71	6	11	–	88
Amortization	(23)	(33)	(97)	–	(153)
Impairment recognition	(32)	–	–	–	(32)
Cumulative translation adjustment	(1,024)	(34)	(137)	(82)	(1,277)
Balance at December 31, 2015	2,438	80	290	284	3,092
Cost	2,696	435	963	284	4,378
	(258)	(355)	(673)	–	(1,286)

Accumulated amortization					
Balance at December 31, 2015	2,438	80	290	284	3,092
Estimated useful life - years	(*)	5	5	Indefinite	

(\*) Mainly comprised of assets with indefinite useful lives, which are reviewed annually to determine whether events and circumstances continue to support an indefinite useful life assessment.

(\*\*) Includes US\$ 10,446 reclassified from Intangible Assets to Property Plant and Equipment, as a result of the declaration of commerciality of areas of the Assignment Agreement.

As of December 31, 2015, the Company did not recognize impairment loss related to goodwill.

### **13.2. Exploration rights returned to the Brazilian Agency of Petroleum, Natural Gas and Biofuels - Agência Nacional de Petróleo, Gás Natural e Biocombustíveis (ANP)**

Exploration areas returned to the ANP in 2015, totaling US\$ 25 (US\$ 83 in 2014) are set out below:

<b>Area</b>	<b>Exploratory stage</b>	
	<b>Exclusive Concession</b>	<b>Partnership</b>
Campos Basin	-	1
Santos Basin	1	1
Ceará Basin	-	1
Espírito Santo Basin	-	3
Camamu Almada Basin	-	1
Amazonas Basin	-	2
Parecis Basin	2	-

### **13.3. Exploration rights - production sharing contract**

Following the first pre-salt public auction held in October, 2013, the Libra consortium, comprised of Petrobras (40% interest), Shell (20% interest), Total (20% interest), CNODC (10% interest), CNOOC (10% interest) and the Brazilian Pre-Salt Oil and Natural Gas Management Company (*Empresa Brasileira de Administração de Petróleo e Gás Natural S.A. - Pré-Sal Petróleo PPSA*) as the manager of the agreement, entered into a production sharing contract with the Federal Government on December 2, 2013.

The contract granted rights to explore and operate oil and gas production in a strategic pre-salt area known as the *Libra* block, comprising an area of approximately 1,550 km<sup>2</sup>, located in ultra-deep waters in the Santos Basin. This





## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

was the first oil and gas production sharing contract signed in Brazil. The contract is for 35 years and cannot be renewed.

A signature bonus (acquisition cost) of US\$ 6,589 was paid by the consortium. The Company paid US\$ 2,636 (its 40% share of the acquisition cost paid by the consortium) recognized in its intangible assets as Rights and Concessions.

Currently, the project is in the exploration phase (4 years), which exploration program comprises, at a minimum, 3D seismic acquisition, two exploratory wells and Extended Well Test (EWT). The seismic data were acquired in 2014.

In February of 2016, the Brazilian Agency of Petroleum ANP approved the Discovery Appraisal Plan – Plano de Avaliação de Descobertas – PAD of the well 2-ANP-2A-RJS.

### **13.4. Service concession agreement - Distribution of piped natural gas**

As of December 31, 2015, intangible assets include service concession agreements related to piped natural gas distribution in Brazil, in the amount of US\$ 149 (US\$ 210 in 2014), maturing between 2029 and 2043, which may be renewed. According to the distribution agreements, service is be provided to customers in the industrial, residential, commercial, automotive, air conditioning and transport sectors, among others.

The consideration receivable is a factor of a combination of operating costs and expenses, and return on capital invested. The rates charged for gas distribution are subject to periodic reviews by the state regulatory agency.

The agreements establish an indemnity clause for investments in assets which are subject to return at the end of the service agreement, to be determined based on evaluations and appraisals.

## **14. Impairment**

The Company tests its assets or cash-generating units (CGUs) for impairment at the end of each reporting period and whenever there is an indication that the assets or units may be impaired.

### **14.1. Property, plant and equipment and intangible assets**

For impairment testing purposes the Company uses the value in use of its property, plant and equipment and intangible assets (individually or grouped into cash-generating units - CGUs) as their recoverable amount. In measuring value in use the Company bases its cash flow

projections on:

- The estimated useful life of the asset or assets grouped into the CGU, based on the expected use of those assets and, considering the Company's maintenance policy;
- Assumptions and financial budgets/forecasts approved by Management for the period corresponding to the expected life cycle of each different business; and
- A pre-tax discount rate, which is derived from the Company's post-tax weighted average cost of capital (WACC).

F-44

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The main cash flow projections used to measure the value in use of the CGUs were mainly based on the following assumptions:

	<b>2016</b>	<b>Long term Average</b>
Average Brent (US\$/bbl)	45	72
Average Brazilian Real (Real /U.S. dollar exchange rate)	4.06	3.55

**14.1.1. Impairment of property, plant and equipment and intangible assets**

In 2015 the Company recognized impairment losses and reversals of impairment losses for certain assets and CGUs, mainly due to the following events occurred in the last quarter of 2015:

- Revision of the Company's mid and long term assumptions reflecting the new oil price scenario (international crude oil prices);
- Decrease in estimates of proved reserves and probable reserves;
- A significant decrease in estimated future capital expenditures pursuant to a revision of the Company's portfolio (based on the latest updated of its 2015-2019 Business and Management Plan in January 2016);
- A revision of geological characteristics of the Papa-Terra field reservoir; and
- Higher discount rates used to measure the value-in-use of our assets and CGUs, attributable to an increase in Brazil's risk premium resulting from a credit risk downgrade (losing its investment grade status).

Impairment losses and reversals of impairment losses were recognized in the statement of income and are presented as follows:

<b>Assets or CGUs, by nature</b>	<b>Carrying amount 2015</b>	<b>Recoverable amount</b>	<b>Impairment (*) / (**)</b>	<b>Business segment</b>	<b>Comments</b>
Producing properties: assets related to E&P activities in Brazil (several CGUs)	21,202	12,139	8,653	E&P - Brazil	item (a1)

Comperj	1,586	234	1,352	RTM - Brazil	item (b1)
Oil and gas producing properties abroad	1,548	918	637	E&P - Abroad	item (c1)
Oil and gas production and drilling equipment	750	243	507	E&P - Brazil	item (d1)
UFN III	935	434	501	Gas & Power	item (e)
Suape Petrochemical Complex	1,143	943	200	RTM - Brazil	item (f1)
Nitrogen Fertilizer Plant - UFN-V	190	–	190	Gas & Power	
Biodiesel plants	134	88	46	Biofuel - Brazil	
Others	341	156	210	Several segments	
Total	27,829	15,155	12,296		

**2014**

Producing properties: assets related to E&P activities in Brazil (several CGUs)	6,425	4,863	1,562	E&P - Brazil	item (a2)
---	-------	-------	-------	-----------------	--------------

Comperj	9,721	1,501	8,220	RTM - Brazil	item (b2)
---------	-------	-------	-------	-----------------	--------------

Oil and gas producing properties abroad	3,126	1,458	1,668	E&P - Abroad	item (c2)
--	-------	-------	-------	-----------------	--------------



Oil and gas production and drilling equipment	1,091	555	536	E&P - Brazil	item (d2)
---	-------	-----	-----	--------------	-----------

Suape Petrochemical Complex	2,847	1,726	1,121	RTM - Brazil	item (f2)
-----------------------------	-------	-------	-------	-----------------	--------------

2nd refining unit of RNEST	6,207	2,765	3,442	RTM - Brazil	item (g)
----------------------------	-------	-------	-------	-----------------	-------------

Araucária (fertilizers plant)	367	251	116	Gas & Power
-------------------------------	-----	-----	-----	----------------

Nansei Sekiyu K.K. refinery	129	–	129	RTM - Abroad
-----------------------------	-----	---	-----	-----------------

Others	26	32	(6)
--------	----	----	-----

Total	29,939	13,151	16,788
-------	--------	--------	--------

(\*) Impairment losses and reversals.



(\*\*) Excludes impairment charges on assets classified as held for sale of US\$ 3 in 2015 and US\$ 35 in 2014.

F-45

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **a1) Producing properties in Brazil - 2015**

Impairment losses of US\$ 8,653 were recognized in 2015 for certain oil and gas fields under E&P concessions, as their recoverable values were below their carrying amount. Cash flow projections were based on: financial budgets/forecasts approved by Management; and an 8.3% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the E&P business. The impairment losses related primarily to the following fields: *Papa-Terra* (US\$ 2,234), *Centro Sul* group (US\$ 1,179), *Uruguá* group (US\$ 986), *Espadarte* (US\$ 593), *Linguado* (US\$ 489), *CVIT – Espírito Santo* group (US\$ 375), *Piranema* (US\$ 341) *Lapa* (US\$ 317), *Bicudo* (US\$ 240), *Frade* (US\$ 198), *Badejo* (US\$ 190), *Pampo* (US\$ 91) and *Trilha* (US\$ 84). These impairment losses are mainly due to the impact of the decline in international crude oil prices on the Company's price assumptions, the use of a higher discount rate, as well as the geological revision of *Papa-Terra* reservoir.

### **a2) Producing properties in Brazil - 2014**

In 2014, impairment losses of US\$ 1,562 were recognized, mainly with respect to certain oil and gas fields under E&P concessions, whose recoverable amount was determined to be below their carrying amount. Cash flow projections were based on: financial budgets/forecasts approved by Management; and a 7.2% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the E&P business. The impairment losses were mainly related to the impact of the decline in international crude oil prices on the Company's price assumptions and were principally recognized for the following fields: *Frade*, *Pirapitanga*, *Tambuatá*, *Carapicu* and *Piracucá*.

### **b1) Comperj - 2015**

An impairment loss of US\$ 1,352 was recognized in 2015 for refining assets of Comperj. Cash flow projections were based on: financial budgets/forecasts approved by Management, and; an 8.1% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the refining business reflecting a specific risk premium for the postponed projects. This impairment loss was mainly attributable to: (i) the use of a higher discount rate; (ii) the delay in expected future cash inflows resulting from postponing construction.

### **b2) Comperj – 2014**

In 2014, an impairment loss of US\$ 8,220 was recognized in Comperj. Cash flow projections were based on: financial budgets/forecasts approved by Management; and a 7% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the refining business.

The impairment loss was mainly attributable to: (i) project planning deficiencies; (ii) the use of a higher discount rate, reflecting a specific risk premium for the postponed projects; (iii) a delay in expected future cash inflows resulting from postponing the project; and (iv) the Company's business context of lower projected economic growth.

**c1) Producing properties abroad - 2015**

Impairment losses of US\$ 637 were recognized in E&P assets abroad. Cash flow projections were based on: financial budgets/forecasts approved by Management; and 5.6% p.a. to 10.4% p.a. post-tax discount rates (real rates, excluding inflation) derived from the WACC for the E&P business in different countries. The impairment losses were mainly in producing properties located in the United States (US\$ 448) and Bolivia (US\$ 157), attributable to the decline in international crude oil prices.

F-46

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **c2) Producing properties abroad - 2014**

In 2014, impairment losses of US\$ 1,668 were recognized in international E&P assets. Cash flow projections were based on: financial budgets/forecasts approved by Management; and 5.4% p.a. to 11.2% p.a. post-tax discount rates (real rates, excluding inflation) derived from the WACC for the E&P business in different countries. The impairment losses were mainly in Cascade and Chinook producing properties located in the United States (US\$ 1,567) and were mainly attributable to the decline in international crude oil prices.

### **d1) Oil and gas production and drilling equipment in Brazil - 2015**

Impairment losses of US\$ 507 were recognized in 2015 for oil and gas production and drilling equipment which were not directly related to oil and gas producing properties. Cash flow projections were based on: financial budgets/forecasts approved by Management; and a 9.2% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the oil and gas services and equipment industry. The impairment losses were mainly related to the planned idle capacity of two drilling rigs in the future and the use of a higher discount rate.

### **d2) Oil and gas production and drilling equipment in Brazil – 2014**

In 2014, impairment losses of US\$ 536 were recognized in oil and gas production and drilling equipment, unrelated to oil and gas producing properties. Cash flow projections were based on: financial budgets/forecasts approved by Management; and an 8% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the oil and gas services and equipment industry. The impairment losses are mainly related to idle capacity of two drilling rigs in the future and to the demobilization of two oil platforms, which were not deployed in any oil and gas property as of December 31, 2014.

### **e) Fertilizer Plant - UFN III - 2015**

Impairment losses of US\$ 501 were recognized in 2015 for the fertilizer plant UFN III (Unidade de Fertilizantes Nitrogenados III), located on *Três Lagoas*, (state of *Mato Grosso do Sul*). Cash flow projections were based on: financial budgets/forecasts approved by Management; and a 7.1% p.a. (6.7% p.a. in 2014) post-tax discount rate (real rate, excluding inflation) derived from the WACC for the Gas & Power business, reflecting a specific risk premium for the postponed projects. The impairment losses were mainly related to: (i) the use of a higher discount rate; and (ii) the delay in expected future cash inflows resulting from postponing the project.

### **f1) Suape Petrochemical Complex - 2015**

An impairment loss of US\$ 200 was recognized in 2015 for *Companhia Integrada Têxtil de Pernambuco S.A. - CITEPE* and *Companhia Petroquímica de Pernambuco S.A. – PetroquímicaSuape*. Cash flow projections were based on: financial budgets/forecasts approved by Management; and a 7.2% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the petrochemical business. The impairment loss was mainly attributable to changes in market and prices assumptions resulting from a decrease in economic activity in Brazil, a reduction in the spread for petrochemical products in the international market and the use of a higher discount rate.

## **f2) Suape Petrochemical Complex - 2014**

In 2014, an impairment loss of US\$ 1,121 was recognized in *Companhia Integrada Têxtil de Pernambuco S.A. - CITEPE* and *Companhia Petroquímica de Pernambuco S.A. – PetroquímicaSuape*. Cash flow projections were based on: 30-year period and zero-growth rate perpetuity; financial budgets/forecasts approved by Management; and a 6.2% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the petrochemical business. The impairment loss is mainly attributable to changes in market assumptions and

F-47

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

forecasts resulting from a decrease in economic activity, a reduction in the spread for petrochemical products in the international market and modifications in tax regulations.

**g) Second refining unit in RNEST - 2014**

In 2014, an impairment loss of US\$ 3,442 was recognized in the second refining unit in RNEST. Cash flow projections are based on: financial budgets/forecasts approved by Management; and a 7% p.a. post-tax discount rate (real rate, excluding inflation) derived from the WACC for the refining business. The impairment loss was mainly attributable to: (i) project planning deficiencies; (ii) the use of a higher discount rate, reflecting a specific risk premium for the postponed projects; (iii) a delay in expected future cash inflows resulting from postponing the project; and (iv) the Company's business context of lower projected economic growth.

**14.2. Investments in associates and joint ventures (including goodwill)**

Value in use is generally used for impairment test of Investments in associates and joint ventures (including goodwill). The basis for estimates of cash flow projections includes: projections covering a period of 5 to 12 years, zero-growth rate perpetuity, budgets, forecasts and assumptions approved by management and a pre-tax discount rate derived from the WACC or the Capital Asset Pricing Model (CAPM), when applicable.

The carrying amount and the value in use of the investments in associates and joint ventures which include goodwill as of December 31, 2015 are set out below:

<b>Investments</b>	<b>Segment</b>	<b>% Post-tax discount rate (real interest rate) p.a.</b>	<b>Value in use</b>	<b>Carrying Amount</b>
--------------------	----------------	---	-------------------------	----------------------------

Braskem S.A. (*)	RTM	11.3	3,452	805
------------------	-----	------	-------	-----



Natural Gas Distributors	Natural Gas	5.7	367	251
--------------------------	-------------	-----	-----	-----

Guarani S.A.	Biofuels	9.3	194	250
--------------	----------	-----	-----	-----

(\*) The tax discount of Braskem is CAPM petrochemical segment; as it considers that cash flow projections via dividends.

#### **14.2.1. Investment in publicly traded associate (Braskem S.A.)**

Braskem's shares are publicly traded on stock exchanges in Brazil and abroad. The quoted market value as of December 31, 2015, was U.S.\$ 1,402, based on the quoted values of both Petrobras's interest in Braskem's common stock (47% of the outstanding shares) and preferred stock (22% of the outstanding shares) as set out note 11.4. However, trading of the common shares is extremely limited, since non-signatories of the shareholders' agreement hold only approximately 3% of the common shares as of December 31, 2015.

In addition, given the operational relationship between Petrobras and Braskem, the recoverable amount of the investment, for impairment testing purposes, was determined based on value in use, considering future cash flow projections via dividends and other distributions. As the recoverable amount was higher than the carrying amount, no impairment losses were recognized for this investment.

Cash flow projections to determine the value in use of Braskem were based on the following key assumptions:

- Estimated average exchange rate of R\$ 4.06 to U.S.\$1.00 in 2016 (converging to R\$ 3.55 in the long run);
- Average Brent crude oil price at US\$ 45 in 2016, converging to US\$ 72 in the long run;
- Prices of feedstock and petrochemical products reflecting projected international prices;
- Petrochemical products sales volume estimates reflecting projected Brazilian and global G.D.P growth; and

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

- Increases in the EBITDA margin during the growth cycle of the petrochemical industry in the next years and declining in the long run.

### **14.2.2. Impairment losses on equity-method investments**

Impairment losses on equity-method investments in the amount of US\$ 550 (US\$ 251 in 2014) were recognized in the statement of income as share of earnings in equity-accounted investments, as a result of the following factors:

- A decrease in international crude oil prices in 2015 led to impairment losses in our E&P operations of affiliates of Petrobras Argentina S.A. (a subsidiary of Petrobras International Braspetro B.V. – PIB BV) and of our joint venture in Africa (Petrobras Oil & Gas B.V. - PO&G, a joint venture of PIB BV). Impairment losses of US\$ 92 and US\$ 184, respectively, were recognized with respect to those investments.
- The Company's impairment tests resulted in impairment losses of US\$ 139 in its biofuels segment, mainly as a result of (i) an increase in post-tax discount rate (real rate, excluding inflation) from 7.3% p.a. in 2014 to 9.3% p.a. in 2015; and (ii) a postponement of biofuels projects for an extended period of time (outside the scope of our updated 2015-2019 Business and Management Plan). Those losses include an impairment charge recognized for goodwill in the amount of US\$ 73, mainly related to its associate Guarani S.A. (US\$ 56).
- As a result of worsening economic and financial conditions of Sete Brasil Participações S.A., along with the postponement of a majority of its construction projects and uncertainties about its ability to continue the projects, the Company could not determine the value-in-use of its investment in Sete Brasil Participações S.A. (both directly and through FIP Sondas) and, therefore, recognized impairment losses of US\$ 44 and US\$ 40, respectively in Sete Brasil and FIP Sondas.
- Impairment losses of US\$ 14 were also recognized in Petrobras Netherlands BV (PNBV) with respect to its associate *Arpoador* Drilling B.V. (a subsidiary of *Sete Brasil*).

The Company is continually monitoring its investment in Sete Brasil and will reassess its recoverability when a decision with respect to Sete Brasil's business plan is taken.

### **14.3. Assets classified as held for sale**

Impairment losses were recognized in E&P assets classified as held for sale. The Board of Directors approved the disposal of the Bijupirá and Salema fields, PI, PIII and PIV drilling rigs and PXIV platform. As their fair values were below their carrying amount. Therefore, impairment losses in the amount of US\$ 3 were recognized in 2015.

## **15. Exploration for and evaluation of oil and gas reserves**

The exploration and evaluation activities include the search for oil and gas from obtaining the legal rights to explore a specific area to the declaration of the technical and commercial viability of the reserves.

F-49

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Changes in the balances of capitalized costs directly associated with exploratory wells pending determination of proved reserves and the balance of amounts paid for obtaining rights and concessions for exploration of oil and natural gas (capitalized acquisition costs) are set out in the following table:

**Capitalized Exploratory Well Costs / Capitalized Acquisition Costs (\*)**

	<b>2015</b>	<b>2014</b>
Property plant and equipment		
Opening Balance	7,000	8,802
Additions to capitalized costs pending determination of proved reserves	2,282	4,272
Capitalized exploratory costs charged to expense	(882)	(1,366)
Transfers upon recognition of proved reserves	(960)	(3,835)
Cumulative translation adjustment	(2,239)	(873)
Closing Balance	5,201	7,000
Intangible Assets	2,048	3,044
Capitalized Exploratory Well Costs / Capitalized Acquisition Costs	7,249	10,044

(\*) Amounts capitalized and subsequently expensed in the same period have been excluded from the table above.

Exploration costs recognized in the statement of income and cash used in oil and gas exploration and evaluation activities are set out as follows:

<b>Exploration costs recognized in the statement of income</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Geological and geophysical expenses	416	830	968
Exploration expenditures written off (incl. dry wells and signature bonuses)	1,441	2,178	1,892
Other exploration expenses	54	50	99
Total expenses	1,911	3,058	2,959
<b>Cash used in:</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Operating activities	470	879	1,073
Investment activities	2,736	4,899	8,605
Total cash used	3,206	5,778	9,678

**15.1. Aging of Capitalized Exploratory Well Costs**

The following tables set out the amounts of exploratory well costs that have been capitalized for a period of one year or more after the completion of drilling, the number of projects to which the costs that have been capitalized for a period of greater than one year relate and an aging of those amounts by year (including the number of wells to which those costs relate).

<b>Aging of capitalized exploratory well costs (*)</b>	<b>2015</b>	<b>2014</b>
Exploratory well costs capitalized for a period of one year	1,387	2,024
Exploratory well costs capitalized for a period of greater than one year	3,814	4,976
Total capitalized exploratory well costs	5,201	7,000
Number of projects to which the exploratory well costs capitalized for a period of greater than one year relate	70	69

	<b>Capitalized costs (2015)</b>	<b>Number of wells</b>
2014	1,055	32
2013	778	18
2012	1,054	21
2011	495	15
2010 and previous years	432	15
Exploratory well costs that have been capitalized for a period of greater than one year	3,814	101

(\*) Amounts paid for obtaining rights and concessions for exploration of oil and gas (capitalized acquisition costs) are not included.

Exploratory well costs that have been capitalized for a period of greater than one year since the completion of drilling amount to US\$ 3,814. Those costs relate to 70 projects comprising (i) US\$ 3,254 for wells in areas in which there has been ongoing drilling or firmly planned drilling activities in the near term and for which an evaluation plan ("*Plano de Avaliação*") has been submitted for approval by ANP; and (ii) US\$ 560 relate to costs incurred to evaluate the reserves and their potential development.



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***16. Trade payables**

	<b>12.31.2015</b>	<b>12.31.2014</b>
Third parties in Brazil	3,331	4,949
Third parties abroad	2,566	4,240
Related parties	483	571
Balance on current liabilities	6,380	9,760

**17. Finance debt**

The Company obtains funding through debt financing for capital expenditures to develop crude oil and natural gas producing properties, construct vessels and pipelines, construct and expand industrial plants, among other uses.

The Company has covenants that were not in default in 2015 in its loan agreements and notes issued in the capital markets requiring, among other obligations, the presentation of interim financial statements within 90 days of the end of each quarter (not reviewed by independent auditors) and audited financial statements within 120 days of the end of each fiscal year. Non-compliance with these obligations do not represent immediate events of default and the grace period in which the Company has to deliver these financial statements ranges from 30 to 60 days, depending on the agreement. The Company has also covenants with respect to debt level in some of its loan agreements with the Brazilian Development Bank (*Banco Nacional de Desenvolvimento - BNDES*).

A roll-forward schedule of non-current debt is set out below:

<b>Non-current</b>	<b>Export</b>				
	<b>Credit</b>	<b>Banking</b>	<b>Capital</b>	<b>Others</b>	<b>Total</b>
	<b>Agencies</b>	<b>Market</b>	<b>Market</b>		
In Brazil					
Opening balance at January 1, 2014	–	29,000	1,211	49	30,260
Additions (new funding obtained)	–	4,319	359	–	4,678
Interest incurred during the year	–	202	2	–	204
Foreign exchange/inflation indexation charges	–	1,033	79	1	1,113
Transfer from long term to short term	–	(1,440)	(156)	(18)	(1,614)
Cumulative translation adjustment (CTA)	–	(3,826)	(194)	(4)	(4,024)

Balance at December 31, 2014	–	29,288	1,301	28	30,617
Abroad					
Opening balance at January 1, 2014	5,805	26,908	42,572	690	75,975
Additions (new funding obtained)	281	6,710	13,766	–	20,757
Interest incurred during the year	4	22	46	8	80
Foreign exchange/inflation indexation charges	103	412	(1,433)	20	(898)
Transfer from long term to short term	(742)	(3,411)	(1,260)	(42)	(5,455)
Cumulative translation adjustment (CTA)	(207)	(743)	119	(27)	(858)
Balance at December 31, 2014	5,244	29,898	53,810	649	89,601
Total Balance at December 31, 2014	5,244	59,186	55,111	677	120,218
<b>Non-current</b>					
In Brazil					
Opening balance at January 1, 2015	–	29,288	1,301	28	30,617
Additions (new funding obtained)	–	4,918	989	–	5,907
Interest incurred during the year	–	289	–	–	289
Foreign exchange/inflation indexation charges	–	3,001	80	2	3,083
Transfer from long term to short term	–	(2,389)	(149)	(4)	(2,542)
Cumulative translation adjustment (CTA)	–	(10,410)	(496)	(9)	(10,915)
Balance as of December 31, 2015	–	24,697	1,725	17	26,439
Abroad					
Opening balance at January 1, 2015	5,244	29,898	53,810	649	89,601
Additions (new funding obtained)	163	5,753	2,045	–	7,961
Interest incurred during the year	5	34	48	8	95
Foreign exchange/inflation indexation charges	442	1,342	(1,092)	56	748
Transfer from long term to short term	(767)	(4,183)	(5,770)	(45)	(10,765)
Cumulative translation adjustment (CTA)	(442)	(1,877)	(222)	(56)	(2,597)
Balance as of December 31, 2015	4,645	30,967	48,819	612	85,043
Total Balance as of December 31, 2015	4,645	55,664	50,544	629	111,482

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

	<b>12.31.2015</b>	<b>12.31.2014</b>
Short-term debt	1,523	3,484
Current portion of long-term debt	11,500	6,845
Accrued interest	1,660	1,539
	<b>14,683</b>	<b>11,868</b>

**17.1. Summarized information on current and non-current finance debt**

<b>Maturity in</b>	<b>Up to</b>	<b>1 to 2</b>	<b>2 to 3</b>	<b>3 to 4</b>	<b>4 to 5</b>	<b>5 years</b>	<b>Total</b>	<b>Fair</b>
	<b>1 year</b>	<b>years</b>	<b>years</b>	<b>years</b>	<b>years</b>	<b>onwards</b>	<b>(*)</b>	<b>value</b>
Financing in Brazilian Reais (BRL):								
Floating rate debt	2,349	1,718	2,093	3,486	5,051	5,858	20,555	16,459
Fixed rate debt	1,956	1,255	1,628	3,031	4,428	4,678	16,976	
Average interest rate	393	463	465	455	623	1,180	3,579	
Financing in U.S.Dollars (USD):	15.1%	16.4%	15.0%	13.8%	11.4%	11.2%	13.0%	
Floating rate debt	10,842	8,869	10,215	16,988	9,572	28,276	84,762	66,238
Fixed rate debt	5,571	5,193	7,784	12,122	5,590	8,458	44,718	
Average interest rate	5,271	3,676	2,431	4,866	3,982	19,818	40,044	
Financing in BRL indexed to USD:	4.1%	4.5%	4.1%	4.3%	4.6%	6.0%	4.9%	
Floating rate debt	573	704	704	701	701	5,422	8,805	7,084
Fixed rate debt	24	23	22	19	19	35	142	
Average interest rate	549	681	682	682	682	5,387	8,663	
Financing in Pound Sterling (£):	7.2%	7.0%	7.1%	7.0%	7.1%	7.0%	7.0%	
	68	–	–	–	–	2,543	2,611	1,656

Fixed rate debt	68	—	—	—	—	2,543	2,611	
Average interest rate	5.8%	—	—	—	—	6.1%	6.1%	
Financing in Japanese Yen (¥):	559	94	85	—	—	—	738	724
Floating rate debt	85	85	85	—	—	—	255	
Fixed rate debt	474	9	—	—	—	—	483	
Average interest rate	2.0%	0.8%	0.6%	—	—	—	1.7%	
Financing in Euro (€):	283	12	2,994	1,421	213	3,762	8,685	6,430
Floating rate debt	13	11	11	11	170	—	216	
Fixed rate debt	270	1	2,983	1,410	43	3,762	8,469	
Average interest rate	3.6%	1.6%	3.8%	3.9%	4.1%	4.4%	4.1%	
Financing in other currencies:	9	—	—	—	—	—	9	9
Fixed rate debt	9	—	—	—	—	—	9	
Average interest rate	14.3%	—	—	—	—	—	14.3%	
Total as of December 31, 2015	14,683	11,397	16,091	22,596	15,537	45,861	126,165	98,600
Total Average interest rate	5.9%	6.4%	5.6%	5.8%	6.9%	6.7%	6.3%	
Total as of December 31, 2014	11,868	12,572	11,948	17,789	24,189	53,720	132,086	122,713
Total Average interest rate	3.9%	6.0%	6.4%	5.2%	5.3%	6.0%	5.6%	

\* The average maturity of outstanding debt as of December 31, 2015 is 7.14 years (6.10 years as of December 31, 2014).

The fair value of the Company's finance debt is determined primarily by quoted prices in active markets for identical liabilities (level 1), when applicable US\$ 42,929 as of December 31, 2015. When a quoted price for an identical liability is not available, the fair value is determined based on a theoretical curve derived from the yield curve of the Company's most liquid bonds (level 2) US\$ 55,671 as of December 31, 2015.

The sensitivity analysis for financial instruments subject to foreign exchange variation is set out in note 33.2.

**17.2. Capitalization rate used to determine the amount of borrowing costs eligible for capitalization**

The capitalization rate used to determine the amount of borrowing costs eligible for capitalization was the weighted average of the borrowing costs applicable to the borrowings that were outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. In 2015 the capitalization rate was 5.03% p.a. (4.91% p.a. in 2014).

F-52

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***17.3. Lines of credit**

<b>Company Abroad</b>	<b>Financial institution</b>	<b>Date</b>	<b>Maturity</b>	<b>Amount</b>	<b>Available (Lines of Credit)</b>	<b>Used</b>	<b>Balance</b>
Petrobras	JBIC UKEF -	7/16/2013	12/31/2018	1,500	-	-	1,500
PGT BV	JPMORGAN	12/17/2015	12/22/2016	500	181	181	319
Total				2,000	181	181	1,819
<b>In Brazil</b>							
Petrobras	BNDES	12/17/2012	5/30/2016	563	448	448	115
Petrobras	BNDES	7/31/2013	7/15/2016	129	108	108	20
Petrobras	FINEP	4/16/2014	12/26/2017	65	45	45	20
PNBV	BNDES	9/3/2013	3/26/2018	2,530	418	418	2,112
Transpetro	BNDES	1/31/2007	Not defined	1,314	142	142	1,172
Transpetro	Banco do Brasil Caixa Econômica	7/9/2010	4/10/2038	116	61	61	55
Transpetro	Federal	11/23/2010	Not defined	100	5	5	94
Total				4,817	1,227	1,227	3,588

**17.4. Collateral**

The financial institutions that have provided financing to the Company usually do not require Petrobras to provide collateral related to loans. However, certain specific funding instruments to promote economic development are collateralized, as well as certain debt agreements of the subsidiary *Petrobras Distribuidora* are based on the Company's future exports.

The loans obtained by structured entities are collateralized based on the projects' assets, as well as liens on receivables of the structured entities. Certain wholly-owned subsidiaries issue securities that are fully and unconditionally guaranteed by Petrobras (note 36).

The Company's capital market financing relates primarily to unsecured global notes.

**18. Leases****18.1. Future minimum lease payments / receipts – finance leases**

<b>Estimated lease payments / receivable</b>	<b>Receipts</b>		<b>Payments</b>			
	<b>Future value</b>	<b>Annual interest</b>	<b>Present value</b>	<b>Future value</b>	<b>Annual interest</b>	<b>Present value</b>
2016	161	(105)	56	17	(5)	12
2017 – 2020	738	(432)	306	44	(26)	18
2021 and thereafter	1,545	(448)	1,097	174	(153)	21
As of December 31, 2015	2,444	(985)	1,459	235	(184)	51
Current			66			12
Non-current			1,393			39
As of December 31, 2015			1,459			51
Current			59			16
Non-current			1,455			56
As of December 31, 2014			1,514			72

## **18.2. Future minimum lease payments – operating leases**

Operating leases mainly include oil and gas production units, drilling rigs and other exploration and production equipment, vessels and support vessels, helicopters, land and building leases.

F-53

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

2016	11,686
2017 - 2020	31,089
2021 and thereafter	56,419
At December 31, 2015	99,194
As of December 31, 2014	118,404

In 2015, the balance of estimated future minimum lease payments under operating leases includes US\$ 60,628 (US\$ 69,565 as of December 31, 2014) with respect to assets under construction, for which the lease term has not commenced.

During 2015, the Company recognized expenditures of US\$ 9,898 (US\$ 10,652 during 2014) for operating lease installments.

**19. Related party transactions**

The Company has a related-party transactions policy, approved by its Board of Directors, which establishes rules to ensure that all decisions involving related parties and potential conflicts of interest take into account applicable laws in the countries in which the Company operates and the parties involved in negotiations.

**19.1. Transactions with joint ventures, associates, government entities and pension funds**

The balances of significant transactions are set out in the following table:

	<b>2015</b>	<b>12.31.2015</b>		<b>2014</b>	<b>12.31.2014</b>	
<b>Joint ventures and associates</b>	<b>Income (expense)</b>	<b>Assets</b>	<b>Liabilities</b>	<b>Income (expense)</b>	<b>Assets</b>	<b>Liabilities</b>
State-controlled gas distributors	3,021	255	72	4,507	506	195
Petrochemical companies	3,676	144	45	7,703	205	82
Other associates and joint ventures	571	134	453	537	152	263



	7,268	533	570	12,747	863	540
<b>Government entities</b>						
Government bonds	342	1,115	—	662	4,339	—
Banks controlled by the Federal Government	(4,121)	2,607	24,336	(3,246)	3,814	28,304
Receivables from the Electricity sector (Note 8.4)	1,618	3,415	—	2,364	2,966	—
Petroleum and alcohol account - receivables from Federal government (Note 19.2)	5	219	—	3	317	—
Federal Government - dividends and interest on capital	—	—	—	22	—	—
Others	14	306	316	73	241	224
	(2,142)	7,662	24,652	(122)	11,677	28,528
Pension plans	—	36	110	1	—	135
	5,126	8,231	25,332	12,626	12,540	29,203
Revenues (mainly sales revenues)	8,544			14,297		
Foreign exchange and inflation indexation charges, net	(1,486)			(465)		
Finance income (expenses), net	(1,932)			(1,206)		
Current assets		2,255			6,715	
Non-current assets		5,976			5,825	
Current liabilities			3,248			1,855
Non-current liabilities			22,084			27,348
	5,126	8,231	25,332	12,626	12,540	29,203

## 19.2. Petroleum and Alcohol accounts - Receivables from Federal Government

As of December 31, 2015, the balance of receivables related to the Petroleum and Alcohol accounts was US\$ 219 (US\$ 317 as of December 31, 2014). Pursuant to Provisional Measure 2,181 of August 24, 2001, the Federal Government may settle this balance by using National Treasury Notes in an amount equal to the outstanding balance, or allow the Company to offset the outstanding balance against amounts payable to the Federal Government, including taxes payable, or both options.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The Company has provided all the information required by the National Treasury Secretariat (*Secretaria do Tesouro Nacional - STN*) in order to resolve disputes between the parties and conclude the settlement with the Federal Government.

Following several negotiation attempts at the administrative level, the Company filed a lawsuit in July 2011 to collect the receivables.

The lawsuit is pending court-ordered expert proceedings, which are ongoing and for which the Company has agreed with the court expert's report. This report confirms that the Company has outstanding receivables with the Brazilian Federal Government and states that no supporting documents could be found with respect to the alleged payables by the Company to the Brazilian Federal Government.

The conclusion of court-ordered expert proceedings is pending, awaiting the Federal Government response.

**19.3. Compensation of employees and officers**

The criteria for compensation of employees and officers are established based on the current labor legislation and the Company's policies related to Positions, Salaries and Benefits (*Plano de Cargos e Salários e de Benefícios e Vantagens*).

The compensation of employees (including those occupying managerial positions) and officers in the months of December 2015 and December 2014 were as follows:

**Compensation of employees (amounts refer to monthly compensation in U.S. dollars)**

	<b>2015</b>	<b>2014</b>
Lowest compensation	731.99	1,064.74
Average compensation	4,315.36	5,905.34
Highest compensation	23,442.18	32,309.79
Compensation of highest paid Petrobras officer	27,780.21	38,798.87

The total compensation of Petrobras' key management is set out as follows:

<b>2015</b>		<b>2014</b>		
<b>Officers</b>	<b>Board</b>	<b>Officers</b>	<b>Board</b>	<b>Total</b>
	<b>(members</b>		<b>(members)</b>	
	<b>)</b>		<b>)</b>	<b>Total</b>
	<b>Total</b>		<b>Total</b>	

		<b>and alternates)</b>				
Wages and short-term benefits	3.9	0.4	4.3	4.1	0.5	4.6
Social security and other employee-related taxes	1.0	0.1	1.1	1.1	0.1	1.2
Post-employment benefits (pension plan)	0.4	–	0.4	0.3	–	0.3
Variable compensation(*)				1.4	–	1.4
Total compensation recognized in the statement of income	5.2	0.5	5.7	6.9	0.6	7.5
Total compensation paid	5.2	0.5	5.7	6.5	0.6	7.1
Number of members	8	18	26	7	10	17

(\*) Due to the net loss of the year, the Extraordinary General Meeting, held on April 29, 2015, decided to cancel the full payment of Annual Variable Compensation (Remuneração Variável Anual - RVA 2014) for the year 2014, and also of all the deferred installments not yet paid, of officers' Annual Variable Compensation for the year 2013, according to corporate goals program and to law 6,404/76, article 152, paragraph 2.

In 2015, board members and officers of the consolidated Petrobras group received US\$ 20.3 as compensation (US\$ 30.8 in 2014).

The Extraordinary General Meeting held on July 1, 2015 amended the following:

- The article 18 of the Company's Bylaws to allow board members to have alternates with mandates limited to a two-year period; article 29 to establishes that five Advisory Committees will support the Board of Directors with their appraisals and recommendations regarding specific issues related to the Board; article 41 to permit that board members alternates may participate in all board meetings and receive a fixed monthly stipend as defined by the Board and in accordance with compensation limits established in the General Meeting;

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

- This Extraordinary General Meeting also voted to increase the total Board members compensation established at the Annual General Meeting, by US\$ 245 thousand, in order to cover the fees of the alternate Board members from July 2015 to March 2016.

The compensation of the Advisory Committees to the Board of Directors is apart from the fixed compensation set for the Board members and, therefore, has not been classified under compensation of Petrobras' key management.

In 2015, the alternates of Board members which are also members of these committees received the amount of US\$ 25 thousand, as compensation (US\$ 30 thousand, including related charges).

**20. Provision for decommissioning costs**

<b>Non-current liabilities</b>	<b>2015</b>	<b>2014</b>
Opening balance	8,267	7,133
Adjustment to provision	4,368	2,430
Payments made	(1,242)	(679)
Interest accrued	231	201
Others	121	75
Cumulative translation adjustment	(2,595)	(893)
Closing balance	9,150	8,267

The Company reviews and revises annually its estimated costs associated with well abandonment and dismantling of oil and gas producing properties.

As a result, for 2015, there was a US\$ 883 increase in the provision for decommissioning costs, mainly due to: (i) a US\$ 1,744 increase attributable to an acceleration of abandonment resulting from a shorter economic life of fields attributable to lower crude oil prices (Brent); (ii) a US\$ 1,848 increase due to an experience revision based on additional information obtained from 2015 well abandonments; and (iii) a US\$ 2,915 decrease related to a higher risk-adjusted discount rate of 6.73% p.a. (3.76% p.a. in 2014).

The Company regularly assesses new procedures and technologies in order to optimize the abandonment and dismantling of areas, considering industry best practices and previous experiences related to costs incurred through final abandonment.

**21. Taxes**

**21.1. Income taxes and other taxes**

<b>Income taxes</b>	<b>Current assets</b>		<b>Current liabilities</b>	
	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>12.31.2015</b>	<b>12.31.2014</b>
Taxes in Brazil	959	1,018	62	139
Taxes abroad	24	45	43	108
	983	1,063	105	247

F-56

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Other taxes</b>	<b>Current assets</b>		<b>Non-current assets</b>		<b>Current liabilities</b>		<b>Non-current</b>
	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>(*)</b>
Current / Deferred ICMS (VAT)	807	1,772	605	787	1,045	1,275	–
Current / Deferred PIS and COFINS (taxes on revenues)	746	829	2,026	2,983	487	295	–
CIDE	18	13	–	–	115	8	–
Production taxes	–	–	–	–	622	1,517	–
Withholding income taxes	–	–	–	–	435	486	15
REFIS	–	–	–	–	274	–	11
Others	150	73	184	230	244	281	–
	1,721	2,687	2,815	4,000	3,222	3,862	26
Taxes abroad	44	61	6	8	143	202	–
	1,765	2,748	2,821	4,008	3,365	4,064	26

(\*) The values of other taxes in non-current liabilities are classified in others.

**21.2. Tax amnesty and refinancing program - Programa de Recuperação Fiscal (REFIS)**

On July 16, 2015 Petrobras paid US\$ 514 (US\$ 385 in cash and US\$ 129 using tax credits) to settle a definitive ruling at the administrative stage with respect to a tax deficiency notice issued by the Brazilian Federal Tax Authorities. The notice is related to the tax on financial operations (*Imposto sobre operações financeiras - IOF*) applied to intercompany loans made by Petrobras to foreign subsidiaries in 2008.

In addition, Joint Ordinance 1,064 (*Portaria Conjunta RFB/PGFN 1.064*) issued by the Brazilian Federal Tax Authorities and by the Brazilian Federal Tax Attorney General's Office, and Normative Instruction 1,576/15 (*Instrução Normativa RFB 1.576/15*) issued by the Brazilian Federal Tax Authorities, on August 3, 2015, provided taxpayers an option for partial relief from existing federal tax debts, through a tax amnesty program created under Law 12,996/14 – *Programa de Recuperação Fiscal (REFIS)*. The Company elected to join the *REFIS* to settle the tax liabilities as follows:

a) Pay amounts due under the tax deficiency notices related to the tax on financial operations (IOF) applicable to intercompany loans made by Petrobras to its foreign subsidiaries in 2007, 2009 and 2010, and to pay amounts due related to the IOF applicable to similar intercompany loans made in other periods, for which a tax deficiency notice has not been issued (2011 and 2012), in the amount of US\$ 1,049. The Company had modified its procedures with respect to the payment of the IOF applicable to transactions from 2013 and, therefore, does not expect any additional tax deficiency notices.

b) Pay the tax deficiency notices issued by the Brazilian Federal Tax Authorities related to the alleged failure to pay withholding income tax (*Imposto de Renda Retido na Fonte- IRRF*) on amounts Petrobras paid to its former subsidiary Petrobras International Finance Company (PifCo) with respect to crude oil and oil product imports between 1999 and 2002, 2004, 2005 and 2007 to 2012, in the amount of US\$ 800.

c) Penalties for noncompliance with customs clearance procedures on crude oil and oil product imports from 2008 to 2013, in the amount of US\$ 13.

d) Indexation charges related to REFIS balance of US\$ 9 recognized in the last quarter of 2015.

The Company has agreed to pay those federal tax liabilities in 30 monthly installments, which are updated by the *Selic* interest rate, following an immediate down payment of 20% of the total amount due (after the discounts provided under the *REFIS*) and using tax credits (tax loss carryforwards) to pay for interest and penalties.

As a result, the Company recognized a total charge of US\$ 2,334 in 2015, of which US\$ 1,566 was recognized as other taxes expenses and US\$ 768 as finance expenses, of which the Company has already settled a total amount of US\$ 1,833: US\$ 971 was paid in cash, US\$ 509 by using tax credits and US\$ 353 by using judicial deposits. The remaining portion was recognized as taxes payable.

F-57

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**21.3. Tax amnesty programs – State Tax (*Programas de Anistias Estaduais*)**

In 2015, the Company elected to settle taxes in cash (VAT tax – ICMS) through an amnesty settlement programs administered by the states.

<b>Date</b>	<b>State</b>	<b>Tax Law/Decree</b>	<b>Amount</b>
-------------	--------------	---------------------------	---------------



Jul/15

RJ

7,020/2015

186

Sep/15

ES

10,376/2015 104

Nov/15

DF

5,463/2015

23

Dec/15

BA

13,449/2015 44

Dec/15

PA

1,439/2015

10

2015

Several

3



In 2015 the Company charged to income US\$ 370, of which US\$ 314 was recognized in other taxes and US\$ 56 in finance expense in the Statement of Income.

**21.4. Reduction tax litigation program (Programa de Redução de Litígios Tributários – PRORELIT)**

On October 30, 2015, Petrobras joined the PRORELIT, established by Law No. 13,202 / 15 (Measure Conversion Act No. 685/15) paying US\$ 17, US\$ 5 in cash and US\$ 12 in tax credits debts and customs fines against the Company from 2014 and 2015 and to tax penalties for improper deduction of tax bases in 2003 and 2004. In 2015 the Company charged to income US\$ 17, of which US\$ 7 was recognized in other taxes expenses and US\$ 10 in finance expenses in the Statement of Income.

**21.5. Brazilian income taxes on earnings of offshore investees**

During 2015 the Company has recognized additional income taxes expenses of US\$ 751 related to Brazilian income taxes on income generated by companies incorporated outside Brazil, as set out in the amendments to Brazilian Tax Law (note 4.15).

F-58

---



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***21.6. Deferred income taxes - non-current**

Income taxes in Brazil comprise corporate income tax (IRPJ) and social contribution on net income (CSLL). Brazilian statutory corporate tax rates are 25% and 9%, respectively. The changes in the deferred income taxes are presented as follows:

**a) Changes in deferred income taxes**

	<b>Property, Plant &amp; Equipment</b>		<b>Loans, trade and other receivables / payables and financing</b>	<b>Finance leases</b>	<b>Provision for legal proceedings</b>	<b>Tax losses</b>	<b>Inventories</b>	<b>Interest on capital</b>
	<b>Oil and gas exploration costs</b>	<b>Others</b>						
Balance at January 1, 2014	(13,406)	(3,903)	1,984	(518)	409	3,993	552	1,350
Recognized in the statement of income for the year	(2,055)	3,420	582	(42)	182	2,642	3	(1,418)
Recognized in shareholders' equity	-	-	1,952	(41)	-	-	-	-
Cumulative translation adjustment	1,814	262	(449)	86	(75)	(854)	(66)	68
Others (*)	-	(3)	(70)	(77)	10	(63)	1	-
Balance at December 31, 2014	(13,647)	(224)	3,999	(592)	526	5,718	490	-
Recognized in the statement of income for the period	(1,284)	1,382	227	44	471	2,166	42	1
Recognized in shareholders' equity	-	14	6,486	(14)	-	(152)	-	-

Cumulative translation adjustment	4,608	223	(2,464)	206	(204)	(2,019)	(182)	(1)
Use of tax credits - REFIS and PRORELIT	-	-	-	-	-	(521)	-	-
Others	-	(104)	100	6	(1)	23	3	-
Balance at December 31, 2015	(10,323)	1,291	8,348	(350)	792	5,215	353	-
Deferred tax assets								
Deferred tax liabilities								
Balance at December 31, 2014								
Deferred tax assets								
Deferred tax liabilities								
Balance at December 31, 2015								

(\*) Relates, primarily, to disposal of interests in investees or mergers.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***b) Timing of reversal of deferred income taxes**

Deferred tax assets were recognized based on projections of taxable profit in future periods supported by the Company's 2015-2019 Business and Management Plan (BMP). The main goals and objectives outlined in its business plan include business restructuring, a divestment plan, demobilization of assets and reducing operating expenses.

Management considers that the deferred tax assets will be realized to the extent the deferred tax liabilities are reserved and expected taxable events occur, based on its 2015-2019 Business and Management Plan.

The estimated schedule of recovery/reversal of net deferred tax assets (liabilities) recoverable (payable) as of December 31, 2015 is set out in the following table:

	<b>Deferred income tax</b>	
	<b>Assets</b>	<b>Liabilities</b>
2016	1,310	21
2017	415	19
2018	124	26
2019	989	33
2020	689	26
2021	1,993	27
2022 and thereafter	496	80
Recognized deferred tax credits	6,016	232
Brazil	1,002	-
Abroad	2,437	-
Unrecognized deferred tax credits	3,439	-
Total	9,455	232

Unrecognized deferred tax credits in Brazil in amount of US\$ 1,002 comprise unused tax losses of subsidiaries without maturity which taxable profits are unexpected to be available against them in the future.

At December 31, 2015, the Company had tax loss carryforwards arising from offshore subsidiaries, for which no deferred tax assets had been recognized. These tax losses totaling US\$ 2,437 (US\$ 3,200 as of December 31, 2014) arose from net operating losses, mainly from oil and gas exploration and production and refining activities in the United States of US\$ 2,002 (US\$ 1,833 as of December 31, 2014), as well as Spanish companies in the amount of US\$ 435 (US\$ 485 as of December 31, 2014). In 2014 the Company had tax loss carryforwards from Dutch companies in amount of US\$ 882 which were fully utilized in 2015,

thereby utilizing all available tax credits in that jurisdiction.

An aging of the unrecognized tax carryforwards, from companies abroad, classified by lapse of the applicable statute of limitations is set out below:

**Lapse of Statute of Limitations**

**Unrecognized  
deferred tax  
credits**























2030 and thereafter

1,461

Total

2,437





**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***21.7. Reconciliation between statutory tax rate and tax expense**

A reconciliation between income tax expense and the product of “income before income taxes” multiplied by the Brazilian statutory corporate tax rates is set out in the following table:

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Income (loss) before income taxes	(9,748)	(8,824)	13,410
Nominal income taxes computed based on Brazilian statutory corporate tax rates (34%)	3,314	3,000	(4,558)
Adjustments to arrive at the effective tax rate:			
· Tax benefits from the deduction of interest on capital distribution	(1)	66	1,306
· Different jurisdictional tax rates for companies abroad	(251)	559	644
· Brazilian income taxes on income of companies incorporated outside Brazil (note 21.5)	(751)	–	57
· Tax incentives	11	26	(1)
· Tax loss carryforwards (unrecognized tax losses)	(554)	(1,289)	–
· Write-off - overpayments incorrectly capitalized (note 3)	–	(907)	–
· Non taxable income (deductible expenses), net (*)	(658)	(338)	(198)
· Tax credits from offshore companies in the exploration stage	–	(1)	(2)
· Others	27	205	174
Income taxes benefit (expense)	1,137	1,321	(2,578)
Deferred income taxes	2,043	3,045	(402)
Current income taxes	(906)	(1,724)	(2,176)
	1,137	1,321	(2,578)
Effective tax rate	11.7%	15.0%	19.2%

(\*) Includes the principal portion of the IOF tax contingency, as set out in note 21.2 (only the interest and inflation indexation portions are deductible) and share of earnings in equity-accounted investees.

**22. Employee benefits (Post-Employment)**

<b>Liabilities</b>	<b>2015</b>	<b>2014</b>
Petros Pension Plan	5,938	7,874
Petros 2 Pension Plan	71	287
AMS Medical Plan	6,753	9,019
Other plans	88	107
	12,850	17,287
Current	655	796
Non-current	12,195	16,491
	12,850	17,287

## 22.1. Petros Plan and Petros 2 Plan

The Company's post-retirement plans are managed by Fundação Petrobras de Seguridade Social (Petros), which was established by Petrobras as a nonprofit legal entity governed by private law with administrative and financial autonomy.

### a) Petros Plan - Fundação Petrobras de Seguridade Social

The Petros Plan was established by Petrobras in July 1970 as a defined-benefit pension plan and currently provides post-retirement benefits for employees of Petrobras and Petrobras Distribuidora S.A., in order to complement government social security benefits. The Petros Plan has been closed to new participants since September 2002.

Petros performs an annual actuarial review of its costs using the capitalization method for most benefits. The employers (sponsors) make regular contributions in amounts equal to the contributions of the participants (active employees, assisted employees and retired employees), on a parity basis.

Petros' financial statements for 2015 will be presented to the *Superintendência de Previdência Complementar* – PREVIC (Superintendency of Post-retirement Benefits) by July 31, 2016 and in the event of a deficit higher than the ceiling amount established by the Resolution 22/2015, the Pension Plan will be required to initiate a deficit

F-61

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

equating planning in 60 calendar days, beginning on the date of Executive Council approval. Accordingly, participants of the plan and their employers (sponsors) will be called to cover this deficit, pursuant to Brazilian Law (Constitutional Amendment 20/1998 and Complementary Law 109/2001), based on their respective proportions of regular contributions.

The aforementioned ceiling amount is determined by the following formula: 1% (duration of liabilities deducted by 4 years) x (total actuarial obligation).

As of December 31, 2015, the balance of the Terms of Financial Commitment (TFC), signed by Petrobras and Petros in 2008 is US\$ 3,036. The TCF is a financial commitment agreement to cover obligations with the pension plan, which amounts are due in 20 years, with 6% p.a. semiannual coupon payments based on the updated balance. The Company has provided crude oil and oil products pledged as security for the TFC totaling to US\$ 1,719 which are been reviewed.

The employers' expected contributions to the plan for 2016 are US\$ 180 and interest payments on TCF US\$ 188.

The duration of the actuarial liability related to the plan, as of December 31, 2015 is 10.06 years.

### **b) Petros 2 Plan - Fundação Petrobras de Seguridade Social**

Petros 2 Plan was established in July 2007 by Petrobras and certain subsidiaries as a variable contribution plan recognizing past service costs for contributions for the period from August 2002 to August 29, 2007. The Petros 2 Plan currently provides post-retirement benefits for employees of Petrobras, Petrobras Distribuidora S.A., Stratara Asfaltos, Termobahia, Termomacaé, Transportadora Brasileira Gasoduto Brasil-Bolívia S.A. – TBG, Petrobras Transporte S.A. – Transpetro and Petrobras Biocombustível. The plan is open to new participants although there will no longer be payments relating to past service costs.

Certain elements of the Petros 2 Plan have defined benefit characteristics, primarily the coverage of disability and death risks and the guarantee of minimum defined benefit and lifetime income. These actuarial commitments are treated as defined benefit components of the plan and are accounted for by applying the projected unit credit method. Contributions paid for actuarial commitments that have defined contribution characteristics are accrued monthly in the statement of income and are intended to constitute a reserve for programmed retirement. The contributions for the portion of the plan with defined contribution characteristics were US\$ 222 in 2015.

The defined benefit portion of the contributions was suspended from July 1, 2012 to June 30, 2015, as determined by the Executive Council of Petros, based on advice of the actuarial consultants from Petros. Therefore, the entire contributions are being appropriated to the individual accounts of plan participants.

For 2016 the employers' expected contributions to the defined contribution portion of the plan are US\$ 259.

The duration of the actuarial liability related to the plan, as of December 31, 2015 is 29.58 years.

## **22.2. Other plans**

The Company also sponsors other pension and health care plans of certain of its Brazilian and international subsidiaries, including plans with defined benefit characteristics abroad, for subsidiaries in Argentina, Japan and other countries. Most of these plans are funded and their assets are held in trusts, foundations or similar entities governed by local regulations.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***22.3. Pension Plans assets**

Pension plans assets follow a long term investment strategy based on the risks assessed for each different class of assets and provide for diversification, in order to lower portfolio risk. The portfolio profile must comply with the Brazilian National Monetary Council (*Conselho Monetário Nacional – CMN*) regulations.

Petros establishes investment policies for 5-year periods, reviewed annually. Petros uses an asset liability management model (ALM) to address net cash flow mismatches of the benefit plans, based on liquidity and solvency parameters, simulating a 30-year period.

Portfolio allocation limits for the period between 2016 and 2020 for the Petros Plan of the Petrobras Group are 30% to 90% in fixed-income securities, 6% to 45% in variable-income securities, 2% to 8% in real estate, 0% to 15% in loans to participants, 0% to 10% in structured finance projects and up to 0% in variable-income securities abroad. Allocation limits for Petros 2 Plan for the same period are: 60% to 90% in fixed-income securities, 0% to 20% in variable-income securities, 0% to 5% in real estate, 0% to 15% in loans to participants, 0% to 8% in structured finance projects and 0% in variable-income securities abroad.

The pension plan assets by type of asset are set out following:

<b>Type of asset</b>	<b>2015</b>			<b>2014</b>		
	<b>Quoted prices in active markets</b>	<b>Unquoted prices</b>	<b>Total fair value</b>	<b>%</b>	<b>Total fair value</b>	<b>%</b>
Fixed income	4,362	1,089	5,451	43%	7,715	38%
Corporate bonds	–	159	159		374	
Government bonds	4,362	–	4,362		5,881	
Other investments	–	930	930		1,460	
Variable income	4,309	169	4,478	36%	8,684	44%
Common and preferred shares	4,309	–	4,309		8,323	
Other investments	–	169	169		361	
Structured investments	–	978	978	8%	1,601	7%
Private equity funds	–	894	894		1,427	
Venture capital funds	–	9	9		20	
Real estate Funds	–	75	75		154	
	–	1,075	1,075	9%	1,436	7%

Real estate properties	8,671	3,311	11,982	96%	19,436	96%
Loans to participants			531	4%	715	4%
			12,513	100%	20,151	100%

As of December 31, 2015, the investment portfolio included Petrobras' common and preferred shares in the amount of US\$ 66 and US\$ 57, respectively, and Petros' real estate properties leased by the Company in the amount of US\$ 134.

Loans to participants are measured at amortized cost, which is considered to be an appropriate estimate of fair value.

#### **22.4. Medical Benefits: Health Care Plan - *Assistência Multidisciplinar de Saúde* ("AMS")**

Petrobras, Petrobras Distribuidora S.A., Petrobras Transporte S.A. – Transpetro, Petrobras Biocombustível and Transportador Brasileira Gasoduto Brasil-Bolívia - TBG operate a medical benefit plan for their employees in Brazil (active and retired) and their dependents: the AMS health care plan. The plan is managed by the Company based on a self-supporting benefit assumption and includes health prevention and health care programs. The plan is mainly exposed to the risk of an increase in medical costs due to new technologies, new types of coverage and to a higher level of usage of medical benefits. The Company continuously improves the quality of its technical and administrative processes, as well as the health programs offered to beneficiaries in order to hedge such risks.

The employees make fixed monthly contributions to cover high-risk procedures and variable contributions for a portion of the cost of the other procedures, both based on the contribution tables of the plan, which are determined based on certain parameters, such as salary and age levels. The plan also includes assistance towards

F-63

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

the purchase of certain medicines in registered drugstores throughout Brazil. There are no health care plan assets. Benefits are paid and recognized by the Company based on the costs incurred by the participants.

The duration of the actuarial liability related to this health care plan, as of December 31, 2015 is 21.54 years.

**22.5. Net actuarial liabilities and expenses calculated by independent actuaries and fair value of plans assets**

Aggregate information is presented for other plans, whose total assets and liabilities are not material.

F-64

---



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***a) Changes in the actuarial liabilities, in the fair value of the assets and in the amounts recognized in the statement of financial position**

	2015		Medical Plan		Total
	Pension plan		AMS	Other plans	
<b>Changes in the present value of obligations</b>	<b>Petros</b>	<b>Petros 2</b>	<b>AMS</b>	<b>Other plans</b>	<b>Total</b>
Obligations at the beginning of the year	27,709	543	9,019	167	37,438
Interest expense:	2,847	56	933	19	3,855
Term of financial commitment (TFC)	454	–	–	–	454
Actuarial	2,393	56	933	19	3,401
Current service cost	77	35	58	12	182
Contributions paid by participants	102	–	–	–	102
Benefits paid	(1,213)	(5)	(347)	(4)	(1,569)
Remeasurement: Experience (gains) / losses	(521)	4	(764)	(4)	(1,285)
Remeasurement: (gains) / losses - demographic assumptions	(46)	(49)	3	(1)	(93)
Remeasurement: (gains) / losses - financial assumptions	(2,025)	(95)	853	(7)	(1,274)
Others	–	–	–	23	23
Cumulative Translation Adjustment	(8,760)	(192)	(3,002)	(62)	(12,016)
Obligations at the end of the year	18,170	297	6,753	143	25,363
<b>Changes in the fair value of plan assets</b>					
Fair value of plan assets at the beginning of the year	19,835	256	–	60	20,151
Interest income	2,046	27	–	4	2,077
Contributions paid by the sponsor (Company)	193	–	349	7	549
Contributions paid by participants	102	–	–	–	102

Term of financial commitment (TFC) paid by the Company	165	–	–	–	165
Benefits Paid	(1,213)	(5)	(347)	(4)	(1,569)
Remeasurement: Return on plan assets due to lower interest income	(2,744)	40	–	(1)	(2,705)
Others	–	–	–	13	13
Cumulative Translation Adjustment	(6,151)	(92)	(2)	(25)	(6,270)
Fair value of plan assets at the end of the year	12,233	226	–	54	12,513
<b>Amounts recognized in the Statement of Financial Position</b>					
Present value of obligations	18,170	297	6,753	143	25,363
(-) Fair value of plan assets	(12,233)	(226)	–	(54)	(12,513)
Net actuarial liability as of December 31,	5,937	71	6,753	89	12,850
<b>Changes in the net actuarial liability</b>					
Balance as of January 1,	7,874	287	9,019	107	17,287
Remeasurement effects recognized in other comprehensive income	152	(180)	92	(11)	53
Costs incurred in the period	878	64	991	27	1,960
Contributions paid	(193)	–	(349)	(7)	(549)
Payments related to Term of financial commitment (TFC)	(165)	–	–	–	(165)
Others	–	–	–	10	10
Cumulative Translation Adjustment	(2,609)	(100)	(3,000)	(37)	(5,746)
Balance as of December 31,	5,937	71	6,753	89	12,850

F-65

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

	<b>2014</b>		<b>Medical Plan</b>		
	<b>Pension plan</b>		<b>AMS</b>	<b>Other plans</b>	<b>Total</b>
<b>Changes in the present value of obligations</b>	<b>Petros</b>	<b>Petros 2</b>			
Obligations at the beginning of the year	27,804	354	6,999	151	35,308
Interest expense:	3,599	45	969	17	4,630
Term of financial commitment (TFC)	441	–	–	–	441
Actuarial	3,158	45	969	17	4,189
Current service cost	58	33	176	11	278
Contributions paid by participants	164	–	–	–	164
Benefits paid	(1,236)	(10)	(395)	(6)	(1,647)
Remeasurement: Experience (gains) / losses	1,114	158	(350)	7	929
Remeasurement: (gains) / losses - demographic assumptions	(2,022)	(55)	(757)	(6)	(2,840)
Remeasurement: (gains) / losses - financial assumptions	1,966	77	3,645	5	5,693
Others	–	–	–	7	7
Cumulative Translation Adjustment	(3,738)	(59)	(1,268)	(19)	(5,084)
Obligations at the end of the year	27,709	543	9,019	167	37,438
<b>Changes in the fair value of plan assets</b>					
Fair value of plan assets at the beginning of the year	22,462	233	–	40	22,735
Interest income	2,863	29	–	4	2,896
Contributions paid by the sponsor (Company)	245	–	396	7	648
Contributions paid by participants	164	–	–	–	164
Term of financial commitment (TFC) paid by the Company	203	–	–	–	203
Benefits Paid	(1,236)	(10)	(395)	(6)	(1,647)

Remeasurement: Return on plan assets due to lower interest income	(2,206)	37	—	4	(2,165)
Others	(1)	—	—	20	19
Cumulative Translation Adjustment	(2,659)	(33)	(1)	(9)	(2,702)
Fair value of plan assets at the end of the year	19,835	256	—	60	20,151
<b>Amounts recognized in the Statement of Financial Position</b>					
Present value of obligations	27,709	543	9,019	167	37,438
(-) Fair value of plan assets	(19,835)	(256)	—	(60)	(20,151)
Net actuarial liability as of December 31,	7,874	287	9,019	107	17,287
<b>Changes in the net actuarial liability</b>					
Balance as of January 1,	5,342	121	6,999	111	12,573
Remeasurement effects recognized in other comprehensive income	3,264	143	2,538	2	5,947
Costs incurred in the period	794	49	1,155	24	2,022
Contributions paid	(245)	—	(396)	(7)	(648)
Payments related to Term of financial commitment (TFC)	(203)	—	—	—	(203)
Others	1	—	—	(13)	(12)
Cumulative Translation Adjustment	(1,079)	(26)	(1,277)	(10)	(2,392)
Balance as of December 31,	7,874	287	9,019	107	17,287

**b) Defined benefit costs**

	<b>2015</b>		<b>Medical Plan</b>	<b>Other Plans</b>	<b>Total</b>
	<b>Pension Plans</b>				
	<b>Petros</b>	<b>Petros 2</b>			
Service cost	77	35	58	12	182
Interest on net liabilities (assets)	801	29	933	15	1,778
Others	—	—	—	—	—
Net expenses for the year	878	64	991	27	1,960
Related to active employees:					
Included in the cost of sales	258	33	204	2	497
Operating expenses in statement of income	133	27	128	24	312

Related to retirees	487	4	659	1	1,151
Net expenses for the year	878	64	991	27	1,960

F-66

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

	<b>2014</b>		<b>Medical Plan</b>	<b>Other Plans</b>	<b>Total</b>
	<b>Pension Plans</b>				
	<b>Petros</b>	<b>Petros 2</b>			
Service cost	58	33	176	11	278
Interest on net liabilities (assets)	736	16	969	13	1,734
Others	–	–	10	–	10
Net expenses for the year	794	49	1,155	24	2,022
Related to active employees:					
Included in the cost of sales	255	26	347	(1)	627
Operating expenses in statement of income	140	22	179	24	365
Related to retirees	399	1	629	1	1,030
Net expenses for the year	794	49	1,155	24	2,022

	<b>2013</b>		<b>Medical Plan</b>	<b>Other Plans</b>	<b>Total</b>
	<b>Pension Plans</b>				
	<b>Petros</b>	<b>Petros 2</b>			
Service cost	484	145	192	10	831
Interest on net liabilities (assets)	912	51	735	16	1,714
Others	–	22	–	(1)	21
Net expenses for the year	1,396	218	927	25	2,566
Related to active employees:					
Included in the cost of sales	597	119	267	3	986
Operating expenses in statement of income	355	94	211	20	680
Related to retirees	444	5	449	2	900

Net expenses for the year	1,396	218	927	25	2,566
---------------------------	-------	-----	-----	----	-------

**c) Sensitivity analysis of the defined benefit plans**

The effect of a 100 basis points (bps) change in the assumed discount rate and medical cost trend rate is as set out below:

	<b>Discount Rate</b>		<b>Medical Benefits</b>		<b>Medical Cost</b>	
	<b>Pension Benefits</b>	<b>Pension Benefits</b>	<b>Medical Benefits</b>	<b>Medical Benefits</b>	<b>Medical Benefits</b>	<b>Medical Benefits</b>
	<b>+100</b>	<b>-100</b>	<b>+100</b>	<b>-100</b>	<b>+100</b>	<b>-100</b>
	<b>bps</b>	<b>bps</b>	<b>bps</b>	<b>bps</b>	<b>bps</b>	<b>bps</b>
Pension Obligation	(1,493)	1,777	(722)	877	901	(755)
Current Service cost and interest cost	(78)	94	(61)	72	158	(131)

F-67

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***d) Significant actuarial assumptions**

<b>Assumptions</b>	<b>2015</b>	<b>2014</b>
Discount rate - (real rate)	7.33% (1) / 7.28% (2) / 7.32% (3)	6.14% (1) / 6.20% (2) / 6.15% (3)
Expected Inflation (Brazilian price index - IPCA)	6.87% (1) (2) (3) (4)	6.50% (1) (2) (3) (4)
Nominal discount rate (real rate + inflation)	14.70% (1) / 14.65% (2) / 14.69% (3)	13.04% (1) / 13.10% (2) / 13.05 (3)
Expected salary growth - real rate	1.48% (1) / 2.79% (2)	1.761% (1) / 3.77% (2)
Expected salary growth - nominal (real rate + Inflation)	8.45% (1) / 9.85% (2)	8.37% (1) / 10.52% (2)
Medical plan turnover	0.753% p.a (5)	0.642% p.a (5)
Pension plan turnover	Null	Null
Expected changes in medical and hospital costs	14.92% to 3.70% p.a (6) EX-PETROS 2013 (both genders) (1) (3)	14.47% to 3.00% p.a (6) EX-PETROS 2013 (both genders) (1) (3)
Mortality table	AT-2000 female, smoothed in a 10% coefficient (2)	AT-2000 female, smoothed in a 10% coefficient (2)
Disability table	TASA 1927 (1) / Álvaro Vindas (2) AT-49 male, amplified in a 10% coefficient (1)	TASA 1927 (1) (3) / Álvaro Vindas (2) AT-49 male, amplified in a 10% coefficient (1)
Mortality table for disabled participants	(3) IAPB 1957 (2)	(3) IAPB 1957 (2)
Age of retirement	Male, 57 years / Female, 56 years (7)	Male, 57 years / Female, 56 years (7)

(1) Petros Plan for Petrobras Group.

(2) Petros 2 Plan.

(3) AMS Plan.

(4) Inflation reflects market projections: 6.87% for 2016 and converging to 3.70% in 2025 towards.



- (5) Average turnover (only of Petrobras, the sponsor) according to age and employment term.  
 (6) Decreasing rate, converging in 30 years to the long-term expected inflation. Refers only to Petrobras (sponsor) rate.  
 (7) Except for Petros 2 Plan, for which it was used the eligibility as the rules of Regime Geral de Previdência Social (RGPS) and the rules of the Plan.

**e) Expected maturity analysis of pension and medical benefits**

	<b>2015</b>		<b>Medical Plan AMS</b>	<b>Other Plans</b>	<b>Total</b>
	<b>Pension Plan Petros</b>	<b>Petros 2</b>			
Up to 1 Year	1,282	15	286	2	1,585
1 To 2 Years	1,237	15	294	2	1,548
2 To 3 Years	1,195	15	304	2	1,516
3 To 4 Years	1,150	15	313	2	1,480
Over 4 Years	13,306	237	5,556	135	19,234
	18,170	297	6,753	143	25,363

**22.6. Other defined contribution plans**

Petrobras, through its subsidiaries in Brazil and abroad, also sponsors other defined contribution pension plans for employees. Contributions paid of US\$ 6 in 2015 were recognized in the statement of income.

**22.7. Profit sharing**

Profit sharing benefits comply with Brazilian legal requirements and those of the Brazilian Department of Coordination and Governance of State Owned Enterprises (DEST), of the Ministry of Planning, Budget and Management, and of the Ministry of Mines and Energy, and are computed based on the consolidated net income attributable to the shareholders of Petrobras.

In March 2014, the Company and the labor unions reached an agreement regarding a new profit sharing regime, following negotiations started in the context of the 2013/2015 Collective Bargaining Agreement.

Pursuant to the amended rules, profit sharing benefits will be computed based on the results of six corporate indicators, for which annual goals are defined by management (maximum permissible levels of crude oil and oil products spill, lifting cost excluding production taxes in Brazil, crude oil and NGL production in Brazil, feedstock

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

processed - excluding NGL - in Brazil, vessel operating efficiency and percentage of compliance with natural gas delivery schedule).

The results of the six individual goals are factored into a consolidated result that will determine the percentage of the profit to be distributed as a profit sharing benefit to employees.

Pursuant to the amended rules, in the event the Company records a net loss for the period, profit sharing benefit will be one half of the benefit paid in the prior year in addition to half a month's salary for each employee, when the annual goals are achieved.

### **Profit sharing benefits**

In 2014, the annual goals of the six corporate indicators were achieved and, despite the loss for the year, the Company recognized a profit sharing expense of US\$ 444 pursuant to the amended rules.

In 2015, the Company recorded a loss for the year and the annual goals were not achieved, mainly lifting cost excluding production taxes and feedstock processed. Therefore, no provision for profit sharing benefits has been recognized in 2015.

### **22.8. Voluntary Separation Incentive Plan**

In January 2014, the Company launched a Voluntary Separation Incentive Plan (PIDV), which was developed within the context of its Productivity Optimization Plan (POP) to contribute to the achievement of the goals set out in the Business and Management Plan.

On March 31, 2014, the Company recognized in other expenses in the statement of income a provision for the estimated charges. The amounts are subject to changes resulting from employees who cancel their requests for voluntary separation, impacts of Collective Bargaining Agreements, which might increase salaries before separation, inflation-indexation of the floor and the cap based on the Brazilian Consumer Price Index (IPCA), as well as variable additional incentives earned by employees.

From November 30, 2015 to December 18, 2015, the Company re-opened the plan for eligible employees, achieving 374 additional enrollees.

On October 13, 2015, the Petrobras Distribuidora S.A., launched a Voluntary Separation Incentive Plan (PIDV), aligning the expectations of the employees. The enrollment period ended on December 30, 2015 at which time 345 employees had enrolled. On December 31, 2015, the Petrobras Distribuidora S.A. recognized the estimated disbursement of financial

incentives of US\$24.

As of December 31, 2015, 6,554 separations and 249 cancellations of requests were made for voluntary separation of employees who enrolled in the PIDV. Changes in the provision are set out as follows:

Balance as of December 31, 2014	390
Revision of provision (*)	91
Separations in the period	(210)
New enrolments PIDV BR 2015	24
Cumulative translation adjustment	(96)
Balance as of December 31, 2015	199
Current	155
Non-current	44

(\*) Includes cancellation of requests for voluntary separation, compensation increases and inflation indexation charges of the floor and cap amounts.

F-69

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **23. Shareholders' equity**

#### **23.1. Share capital (net of share issuance costs)**

As of December 31, 2015 subscribed and fully paid share capital was US\$ 107,380 and share issuance costs were US\$ 279, represented by 7,442,454,142 outstanding common shares and 5,602,042,788 outstanding preferred shares, all of which are registered, book-entry shares with no par value.

Preferred shares have priority on returns of capital, do not grant any voting rights and are non-convertible into common shares.

#### **23.2. Capital transactions**

##### **a) Incremental costs directly attributable to the issue of new shares**

Includes any transaction costs directly attributable to the issue of new shares, net of taxes.

##### **b) Change in interest in subsidiaries**

Includes any excess of amounts paid/received over the carrying value of the interest acquired/disposed. Changes in ownership interest in subsidiaries that do not result in loss of control of the subsidiary are equity transactions. The main changes in interest in subsidiaries are set out in note 11.

#### **23.3. Profit reserves**

**Legal reserve** – represents 5% of the net income for the year, calculated pursuant to article 193 of the Brazilian Corporation Law.

**Statutory reserve** – is appropriated by applying a minimum of 0.5% of the year-end share capital and is retained to fund technology research and development programs. The balance of this reserve may not exceed 5% of the share capital, pursuant to article 55 of the Company's bylaws.

**Tax incentives reserve** – government grants are recognized in the statement of income and are appropriated from retained earnings to the tax incentive reserve in the shareholders' equity pursuant to article 195-A of Brazilian Corporation Law. This reserve may only be used to offset losses or increase share capital.

The Company recorded a loss in 2015 and 2014, therefore, the effect of the tax incentives in the north and northeast regions of Brazil from *Superintendências de Desenvolvimento do Nordeste* (SUDENE) and *Superintendências de Desenvolvimento da Amazônia* (SUDAM) were not allocated to the tax incentives reserve. However, the impact of tax incentives will be allocated to the tax incentives reserve in future periods, pursuant to Chapter I of Law 12,973/14.

The accumulated amount of tax incentives recognized in the statements of income for the years 2014 and 2015, to be allocated to the tax incentives reserve, is US\$15 (US\$ 7.5 for each year).

**Profit retention reserve** –includes funds intended for capital expenditures, primarily in oil and gas exploration and development activities, as per the capital budget of the Company, pursuant to article 196 of the Brazilian Corporation Law.

The accumulated deficit balance of US\$ 8,446 as of December 31, 2015 will be allocated to the profit retention reserve.

F-70

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **23.4. Other comprehensive income**

In 2015 the Company recognized the following charges mainly as a result of the significant depreciation of the Brazilian *Real* against the U.S. dollar:

- Cumulative translation adjustment of US\$ 29,248; and
- Foreign exchange variation losses of US\$ 19,075 (US\$ 12,589 after taxes) recognized directly in the Company's shareholders' equity in 2015 as a result of its cash flow hedge accounting policy. The cumulative balance of foreign exchange variation losses as of December 31, 2015 is US\$ 30,739 (US\$ 20,288 after taxes), as set out in note 33.
- Share of other comprehensive income (losses) in equity-accounted investments in the amount of US\$ 861.

### **23.5. Dividends**

Shareholders are entitled to receive minimum mandatory dividends (and/or interest on capital) of 25% of the adjusted net income for the year proportional to the number of common and preferred shares, pursuant to Brazilian Corporation Law.

To the extent the Company proposes dividend distributions, preferred shares have priority in dividend distribution, which is based on the highest of 3% of the preferred shares' net book value, or 5% of the preferred share capital. Preferred shares participate under the same terms as common shares in capital increases resulting from the capitalization of profit reserves or retained earnings.

Due to the loss recorded in 2015 and 2014, the Board of Directors did not propose dividend distributions for those years.

### **23.6. Earnings per Share**

**2015**

**2014**

**2013**

Net income (loss) attributable to shareholders of Petrobras	(8,450)	(7,367)	11,094
--	---------	---------	--------

Weighted average number of common and preferred shares outstanding	13,044,496,930	13,044,496,930	13,044,496,930
--	----------------	----------------	----------------



Basic and diluted earnings per common and preferred share (US\$ per share)	(0.65)	(0.56)	0.85
--	--------	--------	------



**24. Sales revenues**

**2015**

**2014**

**2013**

Gross sales	121,490	174,031	172,016
-------------	---------	---------	---------

Sales taxes	(24,176)	(30,374)	(30,554)
-------------	----------	----------	----------

Sales revenues (*)	97,314	143,657	141,462
--------------------	--------	---------	---------

Diesel	30,532	42,586	41,435
--------	--------	--------	--------

Automotive gasoline	16,320	23,702	23,470
---------------------	--------	--------	--------



Jet fuel	3,325	4,357	3,464
----------	-------	-------	-------

Liquefied petroleum gas	2,881	5,622	5,885
-------------------------	-------	-------	-------

Naphtha	2,594	3,729	3,960
---------	-------	-------	-------

Fuel oil (including bunker fuel)	2,297	5,562	5,553
----------------------------------	-------	-------	-------

Other oil products	3,468	5,771	5,760
--------------------	-------	-------	-------

Subtotal oil products	61,417	91,329	89,527
-----------------------	--------	--------	--------

Natural gas	5,894	8,035	7,376
-------------	-------	-------	-------

Ethanol, nitrogen products and renewables	3,868	3,862	4,868
--	-------	-------	-------



Electricity, services and others	4,850	8,384	4,693
----------------------------------	-------	-------	-------

Total domestic market	76,029	111,610	106,464
-----------------------	--------	---------	---------

Exports	9,692	13,930	15,172
---------	-------	--------	--------

Sales Abroad(**)	11,593	18,117	19,826
------------------	--------	--------	--------

Foreign market	21,285	32,047	34,998
----------------	--------	--------	--------

Sales revenues (*)	97,314	143,657	141,462
--------------------	--------	---------	---------

(\*) Analysis of sales revenues by business segment is set out in note 29.

(\*\*) Sales revenues from operations outside of Brazil, other than exports.





**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***25. Other expenses, net**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Legal, administrative and arbitration proceedings	(1,569)	(194)	(269)
Unscheduled stoppages and pre-operating expenses	(1,239)	(1,089)	(923)
Pension and medical benefits - retirees	(1,151)	(1,030)	(900)
Gains / (losses) on disposal/write-offs of assets	(478)	(213)	1,764
Institutional relations and cultural projects	(428)	(743)	(821)
Losses on fines (*)	(374)	(182)	–
E&P areas returned and cancelled projects	(280)	(268)	(19)
Gains / (losses) on decommissioning of returned/abandoned areas	(144)	(443)	58
Voluntary Separation Incentive Plan - PIDV	(115)	(1,035)	–
Health, safety and environment	(95)	(143)	(225)
Expenditure on the provision of evictions	(39)	–	–
Collective bargaining agreement	–	(440)	(419)
Government grants	17	61	181
Amounts recovered – “overpayments incorrectly capitalized”	72	–	–
Reimbursements from E&P partnership operations	530	360	241
Others	(52)	66	219
	(5,345)	(5,293)	(1,113)

(\*) Amount disclosed as other in 2014.

**26. Costs and Expenses by nature**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Raw material / products for resale	(29,110)	(58,539)	(60,068)
Materials, freight, rent, third-party services and other related costs	(20,808)	(23,847)	(23,202)
Impairment	(12,299)	(16,823)	(544)
Depreciation, depletion and amortization	(11,591)	(13,023)	(13,188)

Employee compensation	(9,079)	(13,215)	(12,769)
Production taxes	(6,064)	(13,500)	(14,498)
Other taxes	(2,796)	(760)	(780)
(Losses) /Gains on legal, administrative and arbitration proceedings	(1,569)	(194)	(269)
Exploration expenditures written off (incl. dry wells and signature bonuses)	(1,441)	(2,178)	(1,892)
Unscheduled stoppages and pre-operating expenses	(1,239)	(1,089)	(923)
Allowance for impairment of trade receivables	(941)	(2,378)	(73)
Gains / (losses) on disposal/write-offs of assets	(478)	(213)	1,764
Institutional relations and cultural projects	(428)	(743)	(821)
E&P areas returned and cancelled projects	(280)	(268)	(19)
Changes in inventories	(155)	(1,181)	1,681
Gains / (losses) on decommissioning of returned/abandoned areas	(143)	(443)	58
Health, safety and environment	(95)	(143)	(225)
Amounts recovered – “overpayments incorrectly capitalized”	72	–	–
Write-off - overpayments incorrectly capitalized	–	(2,527)	–
	(98,444)	(151,064)	(125,768)
<b>In the Statement of income</b>			
Cost of sales	(67,485)	(109,477)	(108,834)
Selling expenses	(4,627)	(6,827)	(4,904)
General and administrative expenses	(3,351)	(4,756)	(4,982)
Exploration costs	(1,911)	(3,058)	(2,959)
Research and development expenses	(630)	(1,099)	(1,132)
Impairment	(12,299)	(16,823)	(544)
Other taxes	(2,796)	(760)	(780)
Write-off - overpayments incorrectly capitalized	–	(2,527)	–
Other expenses, net	(5,345)	(5,293)	(1,113)
Profit sharing	–	(444)	(520)
	(98,444)	(151,064)	(125,768)

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***27. Net finance income (expense)**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Debt interest and charges	(6,858)	(6,734)	(5,491)
Foreign exchange gains/(losses) and inflation indexation charges on debt (*)	(3,834)	(561)	(1,603)
Income from investments and marketable securities	693	1,007	1,278
Financial result on net debt	(9,999)	(6,288)	(5,816)
Capitalized borrowing costs	1,773	3,600	3,921
Gains (losses) on derivatives, net	256	337	(181)
Interest income from marketable securities	25	(39)	(95)
Other foreign exchange gains/(losses) and indexation charges, net	394	914	(300)
Other finance expense and income, net (**)	(890)	(159)	(320)
Finance income (expenses), net	(8,441)	(1,635)	(2,791)
Income	1,412	1,949	1,815
Expenses	(6,437)	(3,923)	(2,673)
Foreign exchange gains/ (losses) and inflation indexation charges, net	(3,416)	339	(1,933)
	(8,441)	(1,635)	(2,791)

(\*) Includes debt raised in Brazil (in Brazilian reais) indexed to the U.S. dollar.

(\*\*) In 2015, includes US\$ 834 of finance expense related to the tax amnesty program (REFIS and State Tax) and PRORELIT, as set out note 21 .

**28. Supplemental information on statement of cash flows****Additional information on cash flows:**

Amounts paid/received during the year:	<b>2015</b>	<b>2014</b>	<b>2013</b>
Income taxes paid	567	853	1,446
Withholding income tax paid on behalf of third-parties	1,034	1,852	1,954
<b>Capital expenditures and financing activities not involving cash</b>			
Purchase of property, plant and equipment on credit	171	123	209
Recognition (reversal) of provision for decommissioning costs	4,145	1,999	(629)
	946	147	–

Use of deferred tax and judicial deposit for the payment of  
contingency

F-73

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***29. Segment Information**

As a result of changes in the Company's internal organization in 2015, the international department was extinguished and the composition of the business segments was changed to reflect the allocation of the international activities to E&P, RT&M and Gas & Power, according to the nature of those activities.

For comparative purposes, consolidated assets as of December 31, 2014 and consolidated statement of income for the years 2014 and 2013 are presented based on the Company's current business model.

**Consolidated Exploration Refining,****assets by****Business****and****Transportation****Area -**

<b>12.31.2015</b>	<b>Production</b>	<b>&amp; Marketing</b>	<b>Gas &amp; Power</b>	<b>Biofuels</b>	<b>Distribution</b>	<b>Corporate</b>	<b>Elimina</b>
Current assets	3,639	9,027	2,663	45	2,299	28,866	(3,111)
Non-current assets	120,157	36,465	16,806	437	2,972	10,589	(333)
Long-term receivables	6,467	2,384	1,358	3	859	8,398	(292)
Investments	1,807	879	456	343	34	8	–
Property, plant and equipment	109,724	33,032	14,674	91	1,868	1,949	(41)
Operating assets	79,585	28,803	12,193	81	1,581	1,485	(41)
Under construction	30,139	4,229	2,481	10	287	464	–
Intangible assets	2,159	170	318	–	211	234	–
Total Assets	123,796	45,492	19,469	482	5,271	39,455	(3,444)

**Consolidated assets by Business Area - 12.31.2014**

Current assets	6,725	15,491	4,184	65	3,886	24,205	(3,724)
Non-current assets	154,412	55,986	24,655	1,044	4,274	9,406	(1,922)
Long-term receivables	8,325	3,617	1,423	3	1,261	6,093	(1,859)
Investments	2,270	1,836	624	836	42	145	–

Property, plant and equipment	140,582	50,273	22,237	205	2,685	2,811	(63)
Operating assets	102,136	41,379	17,973	189	2,056	2,117	(63)
Under construction	38,446	8,894	4,264	16	629	694	—
Intangible assets	3,235	260	371	—	286	357	—
Total Assets	161,137	71,477	28,839	1,109	8,160	33,611	(5,646)

F-74

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Consolidated Statement of Income by Business Area (*)</b>	<b>Jan-Dec/2015</b>					
	<b>Exploration</b>	<b>Refining, and Production</b>	<b>Transportation &amp; Marketing</b>	<b>Gas &amp; Power</b>	<b>Biofuels</b>	<b>Distribution Corporate</b>
Sales revenues	35,680	74,321	13,145	229	33,406	–
Intersegments (**)	34,178	22,451	2,073	213	552	–
Third parties (**)	1,502	51,870	11,072	16	32,854	–
Cost of sales	(25,171)	(60,384)	(10,539)	(252)	(30,849)	–
Gross profit (loss)	10,509	13,937	2,606	(23)	2,557	–
Income (expenses)	(13,883)	(5,834)	(2,211)	(95)	(2,785)	(6,363)
Selling, general and administrative	(643)	(2,437)	(747)	(31)	(2,401)	(1,933)
Exploration costs	(1,911)	–	–	–	–	–
Research and development	(172)	(117)	(53)	(9)	(1)	(278)
Other taxes	(160)	(709)	(412)	(2)	(69)	(1,444)
Impairment of assets	(9,830)	(1,664)	(683)	(46)	(76)	–
Other expenses, net	(1,167)	(907)	(316)	(7)	(238)	(2,708)
Income / (loss) before financial results, profit sharing and income taxes	(3,374)	8,103	395	(118)	(228)	(6,363)
Net finance income (expense) –	–	–	–	–	–	(8,441)
Share of earnings in equity-accounted investments	(309)	356	123	(199)	9	(157)
Income / (loss) before income taxes	(3,683)	8,459	518	(317)	(219)	(14,961)
Income taxes	1,200	(2,746)	(132)	41	78	2,851

Net income (loss)	(2,483)	5,713	386	(276)	(141)	(12,110)
Net income attributable to:						
Shareholders of Petrobras	(2,480)	5,727	237	(276)	(142)	(11,816)
Non-controlling interests	(3)	(14)	149	–	1	(294)
	(2,483)	5,713	386	(276)	(141)	(12,110)

(\*) A list of the Company's investees by business segment is set out in note 11.1 of the Company's annual financial statements for the year ended December 31, 2015.

(\*\*)The Company has corrected the allocation between intersegment and third party sales from amounts reported in the Form 6-K furnished by the Company to the SEC on March 23, 2016. There is no effect on net income by segment.



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Consolidated Statement of Income by Business Area</b>	<b>Jan-Dec/2014</b>						
	<b>Exploration</b>	<b>Refining, and Transportation</b>	<b>Gas &amp; Power</b>	<b>Biofuels</b>	<b>Distribution</b>	<b>Corporate</b>	<b>Eliminations</b>
Sales revenues	68,611	114,431	18,373	266	46,893	–	(104)
Intersegments	66,336	35,484	1,730	238	1,129	–	(104)
Third parties	2,275	78,947	16,643	28	45,764	–	–
Cost of sales	(37,220)	(118,350)	(15,698)	(311)	(43,262)	–	105
Gross profit (loss)	31,391	(3,919)	2,675	(45)	3,631	–	447
Income (expenses)	(9,305)	(19,614)	(3,332)	(67)	(2,750)	(6,300)	225
Selling, general and administrative	(624)	(2,866)	(2,571)	(50)	(2,555)	(3,146)	229
Exploration costs	(3,058)	–	–	–	–	–	–
Research and development	(549)	(192)	(85)	(15)	(1)	(257)	–
Other taxes	(74)	(118)	(136)	–	(33)	(399)	–
Impairment of assets	(3,800)	(12,912)	(111)	–	–	–	–
Write-off - overpayments incorrectly capitalized	(806)	(1,403)	(266)	–	(11)	(41)	–
Other expenses, net	(394)	(2,123)	(163)	(2)	(150)	(2,457)	(4)
Income / (loss) before financial results, profit sharing and income taxes	22,086	(23,533)	(657)	(112)	881	(6,300)	672
Net finance income (expense) –	–	–	–	–	–	(1,635)	–
Share of earnings in equity-accounted investments	(80)	132	211	(53)	5	3	–
Profit sharing	(156)	(126)	(20)	(1)	(26)	(115)	–

Income / (loss) before income taxes	21,850	(23,527)	(466)	(166)	860	(8,047)	672
Income taxes	(7,674)	7,758	139	39	(295)	1,582	(228)
Net income (loss)	14,176	(15,769)	(327)	(127)	565	(6,465)	444
Net income attributable to:							
Shareholders of							
Petrobras	14,151	(15,761)	(347)	(127)	565	(6,292)	444
Non-controlling interests	25	(8)	20	—	—	(173)	—
	14,176	(15,769)	(327)	(127)	565	(6,465)	444

F-76

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Consolidated Statement of Income by Business Area</b>	<b>Jan-Dec/2013</b>						
	<b>Exploration</b>	<b>Refining, and Production &amp; Marketing</b>	<b>Gas &amp; Power</b>	<b>Biofuels</b>	<b>Distribution</b>	<b>Corporate</b>	<b>Eliminations</b>
Sales revenues	72,345	114,331	14,572	388	45,244	–	(105)
Intersegments	69,473	33,393	1,228	324	1,000	–	(105)
Third parties	2,872	80,938	13,344	64	44,244	–	–
Cost of sales	(36,951)	(122,624)	(12,614)	(464)	(41,419)	–	105
Gross profit (loss)	35,394	(8,293)	1,958	(76)	3,825	–	(180)
Income (expenses)	(3,559)	(4,060)	(1,192)	(69)	(2,388)	(5,242)	96
Selling, general and administrative	(610)	(3,259)	(1,104)	(55)	(2,379)	(2,642)	163
Exploration costs	(2,959)	–	–	–	–	–	–
Research and development	(522)	(242)	(58)	(16)	(2)	(292)	–
Other taxes	(283)	(190)	(93)	(1)	(37)	(176)	–
Impairment of assets	(545)	–	–	–	1	–	–
Write-off - overpayments incorrectly capitalized	–	–	–	–	–	–	–
Other expenses, net	1,360	(369)	63	3	29	(2,132)	(67)
Income / (loss) before financial results, profit sharing and income taxes	31,835	(12,353)	766	(145)	1,437	(5,242)	(84)
Net finance income (expense)	–	–	–	–	–	(2,791)	–
Share of earnings in equity-accounted investments	167	82	247	(20)	4	27	–
Profit sharing	(190)	(142)	(22)	(1)	(30)	(135)	–

Income / (loss) before income taxes	31,812	(12,413)	991	(166)	1,411	(8,141)	(84)
Income taxes	(10,762)	4,248	(253)	51	(479)	4,587	30
Net income (loss)	21,050	(8,165)	738	(115)	932	(3,554)	(54)
Net income attributable to: Shareholders of Petrobras	21,009	(8,157)	678	(115)	931	(3,198)	(54)
Non-controlling interests	41	(8)	60	—	1	(356)	—
	21,050	(8,165)	738	(115)	932	(3,554)	(54)

F-77

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**Consolidated Statement Exploration  
- breakdown of  
activities abroad 2015**

**Refining,**

**Gas &  
Power**

**Distribution**

**& Transportation**

**Production & Marketing**



<b>Total assets</b>	8,114	1,398	404	783
---------------------	-------	-------	-----	-----

**Statement of income**

Sales revenues	1,863	4,613	550	4,139
----------------	-------	-------	-----	-------

Intersegments	972	1,980	33	2
---------------	-----	-------	----	---

Third parties	891	2,633	517	4,137
---------------	-----	-------	-----	-------

Income before financial results, profit sharing and income taxes	(632)	(57)	71	79
--	-------	------	----	----

Net income (loss) attributable to shareholders of Petrobras	(854)	(48)	104	69
---	-------	------	-----	----







**Consolidated Statement Exploration  
- breakdown of  
activities abroad 2014**

**Refining,**

**Gas &  
Power**

**Distribution**

**& Transportation**

**Production & Marketing**

<b>Total assets</b>	9,623	1,861	472	940
---------------------	-------	-------	-----	-----

**Statement of income**

Sales revenues	3,001	7,406	489	5,166
----------------	-------	-------	-----	-------

Intersegments	1,235	1,528	33	1
---------------	-------	-------	----	---



Third parties	1,766	5,878	456	5,165
---------------	-------	-------	-----	-------

Income before financial results, profit sharing and income taxes	114	(557)	72	97
--	-----	-------	----	----

Net income (loss) attributable to shareholders of Petrobras	(457)	(479)	90	82
---	-------	-------	----	----





**Consolidated Statement Exploration  
- breakdown of  
activities abroad 2013**

**Refining,**

**Gas &  
Power**

**Distribution**

**& Transportation**

**Production & Marketing**



<b>Total assets</b>	13,656	2,652	602	1,085
---------------------	--------	-------	-----	-------

**Statement of income**

Sales revenues	4,324	44,810	2,670	5,223
----------------	-------	--------	-------	-------

Intersegments	2,573	24,679	1,764	7
---------------	-------	--------	-------	---

Third parties	1,751	20,131	906	5,216
---------------	-------	--------	-----	-------

Income before financial results, profit sharing and income taxes	2,037	528	26	106
--	-------	-----	----	-----

Net income (loss) attributable to shareholders of Petrobras	1,665	293	193	93
---	-------	-----	-----	----

### **30. Provisions for legal proceedings**

#### **30.1. Provisions for legal proceedings, judicial deposits and contingent liabilities**

The Company recognizes provisions based on the best estimate of the costs of proceedings for which it is probable that an outflow of resources embodying economic benefits will be required and that can be reliably estimated. These proceedings mainly comprised :

- Labor claims, in particular a review of the methodology by which the minimum compensation based on an employee's position and work schedule (*Remuneração Mínima por Nível e Regime - RMNR*) is calculated and lawsuits concerning remunerated weekly rest;
- Tax claims including claims related to alleged failure to pay VAT (*ICMS*) tax on jet fuel sales and to Brazilian federal tax credits applied that were disallowed;
- Civil claims related to losses and damages proceedings resulting from the cancellation of an assignment of excise tax (IPI) credits to a third party, failure to pay royalties on oil shale extraction; and
- Environmental claims regarding fishermen seeking indemnification from the Company for a January 2000 oil spill in the State of Rio de Janeiro.

F-78

---



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Provisions for legal proceedings are set out below:

<b>Non-current liabilities</b>	<b>12.31.2015</b>	<b>12.31.2014</b>
Labor claims	851	717
Tax claims	791	104
Civil claims	530	666
Environmental claims	72	40
Other claims	3	13
	<b>2,247</b>	<b>1,540</b>

	<b>12.31.2015</b>	<b>12.31.2014</b>
Opening Balance	1,540	1,246
Additions	1,490	766
Use of provision	(272)	(314)
Accruals and charges	100	66
Others	(13)	(8)
Cumulative translation adjustment	(598)	(216)
Closing Balance	<b>2,247</b>	<b>1,540</b>

**30.2. Judicial deposits**

Judicial deposits made in connection with legal proceedings are set out in the table below according to the nature of the corresponding lawsuits:

<b>Non-current assets</b>	<b>12.31.2015</b>	<b>12.31.2014</b>
Tax	1,044	1,006
Civil	690	663
Labor	684	928
Environmental	78	80
Others	3	5
	<b>2,499</b>	<b>2,682</b>

**30.3. Contingent liabilities**

Contingent liabilities for which either the Company is unable to make a reliable estimate of the expected financial effect that might result from resolution of the proceeding, or when a cash outflow is not probable, are not recognized as liabilities in the financial statements but are disclosed in notes, unless the likelihood of any outflow is considered remote.

The estimated contingent liabilities for legal proceedings as of December 31, 2015 considered possible are set out in the following table:

<b>Nature</b>	<b>Estimate</b>
Tax	29,276
Civil - General	5,108
Labor	5,651
Civil - Environmental	1,472
Others	2
	41,509

A brief description of the nature of the main contingent liabilities (tax, civil, environmental and labor) is set out in the following table:

<b>Description of tax matters</b>	<b>Estimate</b>
-----------------------------------	-----------------

**Plaintiff: Secretariat of the Federal Revenue of Brazil**

1) Withholding income tax (IRRF) and Contribution of Intervention in the Economic Domain (CIDE) on remittances for payments of vessel charters.

Current status: This claim involves lawsuits in different administrative and judicial stages. 8,256

2) Immediate deduction from taxable income (income tax - IRPJ and social contribution - CSLL) of crude oil production development costs in 2008 and 2009.

Current status: Awaiting the hearing of an appeal at the administrative level.

3,022

3) Requests to compensate federal taxes disallowed by the Brazilian Federal Tax Authority.



Current status: Awaiting the hearing of an appeal at the administrative level.

2,514

F-79

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

4) Deduction from taxable income (income tax - IRPJ and social contribution - CSLL) of amounts payed to Petros Plan, as well as several expenses occurred in 2007 and 2008, related to employee benefits and PETROS.

Current status: Awaiting the hearing of an appeal at the administrative level.

1,916

5) Income from subsidiaries and associates located outside Brazil, from 2005 to 2010, not included in the basis of calculation of income tax (IRPJ and CSLL).

Current status: Awaiting the hearing of an appeal at the administrative level.

1,685

6) Incidence of social security contributions over contingent bonuses paid to employees.



Current status: Awaiting the hearing of an appeal at the administrative level.

608

7) Collection of CIDE (Contribution of Intervention in the Economic Domain) from March 2002 to October 2003 on transactions with fuel retailers and service stations protected by judicial injunctions determining that fuel sales were made without gross-up of such tax.

Current status: This claim involves lawsuits in judicial stages.

517

**Plaintiff: State of São Paulo Finance Department**

8) Penalty for the absence of a tax document while relocating a rig to an exploratory block, and on the return of this vessel, as well as collection of the related VAT (ICMS), as a result of the temporary admission being unauthorized, because the customs clearance has been done on the city of Niteroi (on the state of Rio de Janeiro) and not on the state of São Paulo.

Current status: This claim involves lawsuits in judicial stages.

1,322

9) Deferral of payment of VAT (ICMS) taxes on B100 Biodiesel sales and the charge of a 7% VAT rate on B100 on Biodiesel inter-state sales, including states in the Midwest, North and, Northeast regions of Brazil and the State of Espírito Santo.

Current status: This claim involves lawsuits at administrative level.

619



**Plaintiff: States of PR, AM, BA, ES, PA, PE and PB  
Finance Departments**

10) Incidence of VAT (ICMS) over alleged differences on initial and closing inventory, on crude oil and gas sales.

Current status: This claim involves lawsuits in different administrative and judicial levels.

284

**Plaintiff: States of RJ, MG and BA Finance  
Departments**

11) VAT (ICMS) on dispatch of liquid natural gas (LNG) and C5 (tax document not accepted by the tax authority), as well as challenges on the rights to this credit.

Current status: Awaiting the hearing of an appeal at the administrative level.

972

12) Additional VAT (ICMS) rate on jet fuel sales to airlines in the domestic market.

Current status: Awaiting the hearing of an appeal at the administrative level.

950



13) Alleged failure to write-down VAT (ICMS) credits related to zero tax rated or non-taxable sales made by the Company's customers.

Current status: Two Tax Deficiency Notices have been issued and are being disputed at the administrative level, but have not yet been judged.

523

**Plaintiff: States of RJ, SP, ES and BA Finance  
Departments**

14) Misappropriation of VAT tax credit (ICMS) that, per the tax authorities, are not related to property, plant and equipment

Current status: This claim involves several tax notices from the states in different administrative and judicial stages.

326

**Plaintiff: Municipal governments of the cities of Anchieta, Aracruz, Guarapari, Itapemirim, Marataízes, Linhares, Vila Velha and Vitória**

15) Alleged failure to withhold and pay tax on services provided offshore (ISSQN) in favor of some municipalities in the State of Espírito Santo, under the allegation that the service was performed in their coastal waters.

Current status: This claim involves lawsuits in administrative and judicial stages.

698



**Plaintiff: States of SP, RS and SC Finance  
Departments**

16) Collection of VAT (ICMS) related to natural gas imports from Bolivia to the State of Mato Grosso do Sul (MS), alleging that these states were the final destination (consumers) of the imported gas.

Current status: This claim involves lawsuits in different administrative and judicial stages, as well as three civil lawsuits in the Supreme Court.

653

**Plaintiff: States of RJ, SP, SE and BA Finance  
Departments**

17) Alleged failure to withhold VAT (ICMS) credits on the purchase of drilling rig bits and chemical products used in formulating drilling fluid.

Current status: This claim involves lawsuits in different administrative and judicial stages.

325

**Plaintiff: States of SP, CE, PB, RJ, BA and PA  
Finance Departments**

18) VAT (ICMS) and VAT credits on internal consumption of bunker fuel and marine diesel, destined to chartered vessels.



Current status: This claim involves tax notices in  
different administrative and judicial stages.

309

**Plaintiff: State of Pernambuco Finance  
Department**

19) VAT (ICMS) on interstate sales of natural gas destined to the distributors. The tax authority understand that the operations are in fact transfs, due to the trading/industrialization activities at the city-gate, that would define it as an establishment, and consequently charging the difference between the sale and the transfers.

Current status: This claim involves several tax notices in  
different administrative and judicial stages.

360

20) Other tax matters

3,417

Total for tax matters

29,276



**Description of civil matters**

**Estimate**



**Plaintiff: Agência Nacional de Petróleo, Gás  
Natural e Biocombustíveis - ANP**

1) Proceedings challenging an ANP order requiring Petrobras to pay special participation fees (government take) with respect to several fields and alleged failure to comply with the minimum exploration activities program, as well as alleged irregularities in platform measurement systems.

Current status: This claim involves lawsuits in administrative and judicial stages.

1,246

2) Proceeding challenging an ANP order requiring Petrobras to unite Lula and Cernambi fields on the BM-S-11 joint venture; to unite Baúna and Piracicaba fields; and to unite Baleia Anã, Baleia Azul, Baleia Franca, Cachalote, Caxaréu, Jubarte and Pirambu, in the Parque das Baleias complex, which would cause changes to the payment of special participation charges.

Current status: The claim is being disputed in court and in an arbitration proceedings. As a result of a judicial decision the arbitrations have been suspended. On the Lula and Cernanbi proceeding, for the alleged differences on the special participation, the Company made judicial deposits. However, with the cancellation of the favorable injunction, currently the payment of these alleged differences have been made directly to ANP, until a final judicial decision is handed down. On the Baúna and Piracicaba proceeding, Petrobras made court-ordered judicial deposits. On the Parque das Baleias proceeding, as a result of a judicial decision and of a Chamber of Arbitration ruling, the collection of the alleged differences has been suspended.

1,220

**Plaintiff: Refinaria de Petróleo de Manguinhos  
S.A.**

3) Lawsuit seeking to recover damages for alleged anti-competitive practices with respect to gasoline and other oil products (Diesel and LPG) sales in the domestic market.

Current status: This claim is in the judicial stage and was ruled in favor of the plaintiff in the first stage. The Company is taking legal actions to ensure its rights. The Brazilian Antitrust regulator (CADE) has analyzed this claim and did not consider the Company's practices to be anti-competitive.

411



**Plaintiff: Vantage Deepwater Company e  
Vantage Deepwater Drilling Inc**

4) Arbitration in the United States about terminating unilateral service contract of perforation tied to ship-probe Titanium Explorer.

Current status: the process is in phase of knowledge,  
where the company seeks their rights presenting  
documents to prove that the author delinquent  
contractual obligations.

400

5) Other civil matters

1,831

Total for civil matters

5,108





**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**Description of labor matters**

**Estimate**



**Plaintiff: Sindipetro of ES, RJ, BA, MG, SP, PE,  
RN, PR, SC and RS (\*).**

1) Class actions requiring a review of the methodology by which the minimum compensation based on an employee's position and work schedule (Remuneração Mínima por Nível e Regime - RMNR) is calculated.

Current status: The Company filed its collective bargaining agreement with the Superior Labor Court, and on October 19, 2015, the Court ruled in favor of the Company and notified the Regional Labor Courts of its understanding of the matter.

2,957

**Plaintiff: Sindipetro of Norte Fluminense and  
Sindipetro of the State of Bahia**

2) Class Actions regarding wage underpayments to certain employees due to alleged changes in the methodology used to factor overtime into the calculation of paid weekly rest, allegedly computed based on ratios that are higher than those established by Law No. 605/49.

Current status: The Company has appealed a decision with respect to the claim filed by Sindipetro/BA and awaits judgment by the Superior Labor Court. The Company has filed an appeal in the Superior Labor Court to overturn a decision with respect to the claim filed by Sindipetro Norte Fluminense (NF) and awaits judgment.

323

**Plaintiff: Sindipetro of Norte Fluminense –  
SINDIPETRO/NF**

3) The plaintiff claims Petrobras failed to pay overtime for standby work exceeding 12-hours per day. It also demands that Petrobras respects a 12-hour limit per workday, subject to a daily fine.



Current status: Awaiting the Superior Labor Court to judge appeals filed by both parties.

282

4) Other labor matters

2,089

Total for labor matters

5,651

(\*) Includes class actions previously presented as “other labor matters”. The estimate of the expenditure that would be required to settle the obligation and the possibility of outflow of resources embodying economic benefits were reviewed.

F-81

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**Description of environmental matters**

**Estimate**

**Plaintiff: Ministério Público Federal, Ministério Público Estadual do Paraná,**

**AMAR - Associação de Defesa do Meio Ambiente de Araucária and IAP - Instituto Ambiental do Paraná**



1) Legal proceeding related to specific performance obligations, indemnification and compensation for damages related to an environmental accident that occurred in the State of Paraná on July 16, 2000.

Current status: The court partially ruled in favor of the plaintiff, however both parties (the plaintiff and the Company) filed an appeal. 612

**Plaintiff: Instituto Brasileiro de Meio Ambiente - IBAMA and Ministério Público Federal.**

2) Administrative proceedings arising from environmental fines related to Upstream operating contested because of disagreement over the interpretation and application of standards by IBAMA, as well as a public civil action filed by the Ministério Público Federal for alleged environmental damage due to the accidental sinking of P-36 Platform.

Current status: Defense trial is pending and the administrative appeal regarding the fines and, when it comes to civil action, Petrobras appealed the ruling that was unfavorable in the lower court and monitors the use of the procedure that will be judged by the Regional Federal Court. 271

Other environmental matters

589

Total for environmental matters

1,472

### **30.4. Class action and other related proceedings**

Between December 8, 2014 and January 7, 2015, five putative securities class action complaints were filed against the Company in the United States District Court for the Southern District of New York (SDNY). These actions were consolidated on February 17, 2015 (the "Consolidated Securities Class Action"). The Court appointed a lead plaintiff, Universities Superannuation Scheme Limited ("USS"), on March 4, 2015. USS filed a consolidated amended complaint ("CAC") on March 27, 2015 that purported to be on behalf of investors who: (i) purchased or otherwise acquired Petrobras securities traded on the NYSE or pursuant to other transactions in the U.S. during the period January 22, 2010 and March 19, 2015, inclusive (the "Class Period"), and were damaged thereby; (ii) purchased or otherwise acquired during the Class Period certain notes issued in 2012 pursuant to a registration statement filed with the SEC filed in 2009, or certain notes issued in 2013 or 2014 pursuant to a registration statement filed with the SEC in 2012, and were damaged thereby; and (iii) purchased or otherwise acquired Petrobras securities on the Brazilian stock exchange during the Class Period, who also purchased or otherwise acquired Petrobras securities traded on the NYSE or pursuant to other transactions in the U.S. during the same period.

The CAC alleged, among other things, that in the Company's press releases, filings with the SEC and other communications, the Company made materially false and misleading statements and omissions regarding the value of its assets, the amounts of the Company's expenses and net income, the effectiveness of the Company's internal controls over financial reporting, and the Company's anti-corruption policies, due to alleged corruption purportedly in connection with certain contracts, which allegedly artificially inflated the market value of the Company's securities.

On April 17, 2015, Petrobras, Petrobras Global Finance - PGF and the underwriters of notes issued by PGF (the "Underwriter Defendants") filed a motion to dismiss the CAC.

On July 9, 2015, the judge presiding over the Consolidated Securities Class Action ruled on the motion to dismiss, partially granting the Company's motion. Among other decisions, the judge dismissed claims relating to certain debt securities issued in 2012 under the Securities Act of 1933, as time barred by the Securities Act's statute of repose and ruled claims relating to securities purchased on the Brazilian stock exchange must be arbitrated, as established in the Company's bylaws. The judge rejected other arguments presented in the motion to dismiss the CAC and, as a result, the Consolidated Securities Class Action continued with respect to other claims.

As allowed by the judge, a second consolidated amended complaint was filed on July 16, 2015, a third consolidated amended complaint was filed on September 1, 2015, among other things extending the Class Period through July 28, 2015 and adding Petrobras America, Inc. as a defendant, and a fourth consolidated amended complaint ("FAC") was filed on November 30, 2015. The FAC, brought by lead plaintiff and three other plaintiffs – Union Asset Management Holding AG ("Union"), Employees' Retirement System of the State of Hawaii ("Hawaii"), and North Carolina Department of State Treasurer ("North Carolina") (collectively, "class plaintiffs") – brings those



## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

claims alleged in the CAC that were not dismissed or were allowed to be re-pleaded under the judge's July 9, 2015 ruling.

On December 7, 2015, Petrobras, PGF, Petrobras America, Inc. and the Underwriter Defendants filed a motion to dismiss the FAC.

On December 20, 2015, the judge ruled on the motion to dismiss the FAC, partially granting the motion. Among other decisions, the judge dismissed the claims of USS and Union based on their purchases of notes issued by PGF for failure to plead that they purchased the notes in U.S. transactions. The judge also dismissed claims under the Securities Act of 1933 for certain purchases for which class plaintiffs had failed to plead the element of reliance. The judge rejected other arguments presented in the motion to dismiss the FAC and, as a result, the Consolidated Securities Class Action will continue with respect to the remaining claims.

On October 15, 2015, class plaintiffs filed a motion for class certification in the Consolidated Securities Class Action, and on November 6, 2015, Petrobras, PGF, Petrobras America, Inc. and the Underwriter Defendants opposed the motion. On February 2, 2016, the judge granted plaintiffs' motion for class certification, certifying a Securities Act Class represented by Hawaii and North Carolina and an Exchange Act Class represented by USS.

In addition to the Consolidated Securities Class Action, to date, 28 lawsuits have been filed by individual investors before the same judge in the SDNY, consisting of allegations similar to those in the Consolidated Securities Class Action. On August 21, 2015, Petrobras, PGF and the Underwriters Defendants filed a motion to dismiss certain of the individual lawsuits, and on October 15, 2015, the judge ruled on the motion to dismiss, partially granting the motion. Among other decisions, the judge dismissed several Exchange Act, Securities Act and state law claims as barred by the relevant statutes of repose. The judge denied other portions of the motion to dismiss and, as a result, these actions will continue with respect to other claims brought by these class plaintiffs. In addition, a similar lawsuit by individual investors has been filed in the United States District Court for the Eastern District of Pennsylvania.

The judge ordered that (i) the individual lawsuits and the Consolidated Securities Class Action shall be tried together in a single trial that will not exceed a total of eight weeks; (ii) the trial shall begin on September 19, 2016; and (iii) any individual action filed after December 31, 2015 will be stayed in all respects until after the completion of the scheduled trial.

On March 17, 2016, an additional lawsuit was filed by individual investors before the same judge in the SDNY consisting of allegations similar to those in the Consolidated Securities Class Action. Pursuant to the judge's order, this case will be stayed until after the completion of the scheduled trial.

These actions are in their early stages and involve highly complex issues that are subject to substantial uncertainties and depend on a number of factors such as the novelty of the legal theories, the information produced in discovery, the timing of court decisions, discovery from adverse parties or third parties, rulings by the court on key issues, analysis by retained experts, and the possibility that the parties negotiate in good faith toward a resolution.

In addition, the claims asserted are broad, span a multi-year period and involve a wide range of activities, and the class plaintiffs have not specified an amount of alleged damages in the Consolidated Securities Class Action or the additional individual actions.

The uncertainties inherent in all such matters affect the amount and timing of the ultimate resolution of these actions. As a result, the Company is unable to make a reliable estimate of eventual loss arising from the litigation.

F-83

---

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Depending on the outcome of the litigation, we may be required to pay substantial amounts, which could have a material adverse effect on the Company's financial condition, its consolidated results of operations or its consolidated cash flows for an individual reporting period. The Company has engaged a U.S. firm as legal counsel and intends to defend these actions vigorously.

### **30.5. Contingent assets**

#### **Recovery of PIS and COFINS**

The Company filed civil lawsuits against the Federal Government claiming to recover, through offsetting amounts paid as taxes on finance income and foreign exchange variation gains (PIS) in the period between February 1999 and November 2002 and COFINS between February 1999 and January 2004 claiming that paragraph 1 of article 3 of Law No. 9,718/98 is unconstitutional.

On November 9, 2005, the Federal Supreme Court declared this paragraph to be unconstitutional.

On November 18, 2010, the Superior Court of Justice upheld the claim filed by Petrobras in 2006 to recover the COFINS for the period from January 2003 to January 2004. Petrobras then recognized the amount of US\$ 290 as recoverable taxes.

The Company recognized US\$ 957 as recoverable taxes in September 2014 (US\$ 360 in other income and US\$ 597 in finance income) for the lawsuit filed in 2005 to recover PIS and COFINS taxes overpaid on finance income in the period from February 1999 to December 2002, after its right to recover those taxes has been definitely recognized and the amounts and documents necessary to request judicial payment were presented.

As of December 31, 2015, the Company had non-current receivables of US\$ 758 related to PIS and COFINS, which are inflation indexed and awaiting settlement, are set out in the following table:

**12.31.2015**





Inflation indexation

65

Non-current receivables

758

### **31. Commitment to purchase natural gas**

On August 18, 2014, Petrobras reached an agreement with Yacimientos Petroliferos Fiscales Bolivianos (YPFB) to settle controversies regarding several aspects of the Bolivian natural gas import contract to supply the Brazilian domestic market (GSA). This agreement sets out payment schedules and compensations for both parties to resolve different interpretations of the GSA, and includes a contract to secure Bolivian natural gas supply for a thermoelectric power plant - UTE Cuiabá, resulting in a net charge of US\$ 383. Upon, the acceptance of compensations by each party, this agreement has generated a net positive cash flow for Petrobras.

As of December 31, 2015, the total amount of the GSA agreement for the 2016 to 2019 period is approximately 43.95 billion cubic meters (m<sup>3</sup>) of natural gas (equivalent to 30.08 million cubic meters (m<sup>3</sup>) per day) and corresponds to a total estimated value of US\$ 6.46 billion.

### **32. Collateral for crude oil exploration concession agreements**

The Company has granted collateral to the Brazilian Agency of Petroleum, Natural Gas and Biofuels (*Agência Nacional de Petróleo, Gás Natural e Biocombustíveis -ANP*) in connection with the performance of the Minimum Exploration Programs established in the concession agreements for petroleum exploration areas in the total

F-84

---



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

amount of US\$ 1,592 of which US\$ 1,225 were still in force at December 31, 2015, net of commitments undertaken. The collateral comprises crude oil from previously identified producing fields, pledged as security, amounting to US\$ 1,060 and bank guarantees of US\$ 165.

**33. Risk management**

The Company is exposed to a variety of risks arising from its operations, including price risk (related to crude oil and oil products prices), foreign exchange rates risk, interest rates risk, credit risk and liquidity risk. The Company takes account of risks in its business decisions and manages any such risk in an integrated manner in order to enjoy the benefits of diversification.

The Company created a Governance, Risk and Compliance function (and a Chief Governance, Risk and Compliance position) that is responsible for ensuring compliance, with respect to the Company's processes, and for mitigating risk in the Company's operations, including those related to fraud and corruption. The Chief Governance, Risk and Compliance officer, with respect to governance risk and compliance issues, must previously approve any matter submitted to the Executive Board for approval.

Corporate risk management is part of the Company's commitment to act ethically and comply with legal and regulatory requirements of the countries where it operates. The Company accounts for risk whenever it makes a decision and manages risk based on an integrated approach.

To manage market and financial risks the Company preferably takes structuring measures through an adequate capital and leverage management.

A summary of the derivative financial instruments positions held by the Company and recognized in other current assets and liabilities as of December 31, 2015, as well as the amounts recognized in the statement of income and other comprehensive income and the guarantees given is set out following:

	<b>Statement of Financial Position</b>				
	<b>Notional value</b>		<b>Fair value</b>		
			<b>Asset Position (Liability)</b>		<b>Maturity</b>
<b>Derivatives not designated for hedge accounting</b>	<b>12.31.2015</b>	<b>12.31.2014</b>	<b>12.31.2015</b>	<b>12.31.2014</b>	

Future contracts - total (*)	(5,694)	(4,314)	38	70	
Long position/Crude oil and oil products	53,735	84,544	-	-	2016
Short position/Crude oil and oil products	(59,429)	(88,858)	-	-	2016
Options - total (*)	123	(594)	10	0.7	
Call/Crude oil and oil products	-	(364)	-	(0.4)	2016
Put/Crude oil and oil products	123	(230)	10	1.1	2016
Forward contracts - total			6.3	2	
Long position/Foreign currency forwards (ARS/USD)(**)	USD 0	USD 10	-	(1)	2016
Long position/Foreign currency forwards (BLR/USD)(**)	USD 217	USD 0	6	1	2016
Short position/Foreign currency forwards (BRL/USD)(**)	USD 50	USD 249	0.3	2	2016
<b>Derivatives designated for hedge accounting</b>					
Swap - total			(33)	(42)	
Foreign currency / Cross-currency Swap (**)	USD 298	USD 298	(16)	(22)	2016
Interest – Libor / Fixed rate (**)	USD 396	USD 419	(17)	(20)	2017
Total recognized in the Statement of Financial Position			21.3	31.7	
(*) Notional value in thousands of bbl					
(**) Amounts in USD are in million.					

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

	<b>Gains (losses) recognized in the statement of income (*)</b>			<b>Gains (losses) recognized in the Shareholders' Equity (**)</b>			<b>Guarantees given as collateral</b>	
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>12.31.2015</b>	<b>12.31.2014</b>
Commodity derivatives	238	368	(105)	–	–	–	7	6
Foreign currency derivatives	27	(20)	(39)	9	10	10	–	–
Interest rate derivatives	(9)	(11)	–	1	(1)	11	–	–
Embedded derivative - ethanol	–	–	(37)	–	–	–	–	–
	256	337	(181)	10	9	21	7	6
Cash flow hedge on exports (***)	(2,057)	(702)	(303)	(19,075)	(5,741)	(5,923)	–	–
	(1,801)	(365)	(484)	(19,065)	(5,732)	(5,902)	7	6

(\*) Amounts recognized in finance income in the period.

(\*\*) Amounts recognized as other comprehensive income in the period.

(\*\*\*) Using non-derivative financial instruments as designated hedging instruments, as set out note 33.2.

A sensitivity analysis for the different types of market risks, to which the Company is exposed, based on the derivative financial instruments held as of December 31, 2015 is set out following:

<b>Financial Instruments</b>	<b>Risk</b>	<b>Probable Scenario*</b>	<b>Stressed Scenario (Δ of 25%)</b>	<b>Stressed Scenario (Δ of 50%)</b>
<b>Derivatives not designated for hedge accounting</b>				

Future contracts	Crude oil and oil products - price changes	38	(44)	(127)
Forward contracts	Foreign currency - depreciation R\$ x USD	2	(42)	(83)
Forward contracts	Foreign currency - appreciation Argentine peso x USD	-	-	-
Swap	Interest - Euribor decrease	-	-	-
Options	Crude oil and oil products - price changes	9	9	9
		49	(77)	(201)
<b>Derivatives designated for hedge accounting</b>				
Swap		(8)	(59)	(99)
Debt	Foreign currency - appreciation JPY x USD	8	59	99
Net effect		-	-	-
Swap		4	(2)	(3)
Debt	Interest - LIBOR increase	(4)	2	3
Net effect		-	-	-

(\*) The probable scenario was computed based on the following risks: R\$ x U.S. Dollar - a 3.7% depreciation of the Real; Japanese Yen x U.S. Dollar - a 2.9% depreciation of the Japanese Yen; Peso x U.S. Dollar - a 12% depreciation of the Peso; LIBOR Forward Curve - a 0.31% increase throughout the curve. Source: Focus and Bloomberg.

### 33.1. Risk management of price risk (related to crude oil and oil products prices)

Petrobras does not regularly use derivative instruments to hedge exposures to commodity price cycles related to products purchased and sold to fulfill operational needs. Derivatives are used as hedging instruments to manage the price risk of certain short-term commercial transactions.

### 33.2. Foreign exchange risk management

Petrobras seeks to identify and manage foreign exchange rate risks based on an integrated analysis of its businesses with the benefits of diversification. The Company's short-term risk management involves choosing the currency in which to hold cash, such as the Brazilian Real, U.S. dollar or other currency.

The foreign exchange risk management strategy may involve the use of derivative financial instruments to hedge certain liabilities, minimizing foreign exchange rate risk exposure.

**a) Cash Flow Hedge involving the Company's future exports**

The Company designates hedging relationships to account for the effects of the existing hedge between a portion of its long-term debt obligations (denominated in U.S. dollars) and its highly probable U.S. dollar denominated future export revenues, so that gains or losses associated with the hedged transaction (the highly probable future exports) and the hedging instrument (debt obligations) are recognized in the statement of income in the same periods.

F-86

---

**Petróleo Brasileiro S.A. – Petrobras**

## Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

A portion of principal amounts and accrued interest (non-derivative financial instruments), as well as foreign exchange rate forward contracts (derivative financial instruments) have been designated as hedging instruments. Derivative financial instruments expired during the year were replaced by principal and interest amounts in the hedging relationships for which they had been designated. Individual hedging relationships were designated in a one-to-one proportion, meaning that a portion of the highly probable future exports for each month will be the hedged transaction of an individual hedging relationship, hedged by a portion of the company's long-term debt. Only a portion of the Company's forecast exports are considered as highly probable.

Whenever a portion of future exports for a certain period for which a hedging relationship has been designated is no longer highly probable, the Company revokes the designation and the cumulative foreign exchange gains or losses that have been recognized in other comprehensive income remain separately in equity until the forecast exports occur.

Whenever a portion of future exports for a certain period for which a hedging relationship has been designated is no longer not considered highly probable, but is also no longer expected to occur, any related cumulative foreign exchange gains or losses that have been recognized in other comprehensive income from the date the hedging relationship was designated to the date the Company revoked the designation is immediately recycled from equity to the statement of income as a reclassification adjustment.

As of December 31, 2015, a portion of 2016 future exports for which a hedging relationship had been designated was no longer expected to occur and, therefore, the hedging relationship was revoked with respect to that portion of forecast exports and cumulative foreign exchange losses that had been recognized in other comprehensive income from the date the hedging relationship was designated to the date the Company revoked the designation was immediately reclassified from equity to the statement of income as a reclassification adjustment. A US\$ 52 foreign exchange loss was recognized in the statement of income in the quarter ended December 31, 2015.

The principal amounts, the fair value as of December 31, 2015, and a schedule of expected reclassifications to the statement of income of cumulative losses recognized in other comprehensive income (shareholders' equity) based on a USD 1.00 / R\$ 3.9048 exchange rate are set out below:

<b>Hedging Instrument</b>	<b>Hedged Transactions</b>	<b>Nature of the Risk</b>	<b>Maturity Date</b>	<b>Principal Amount (US\$ million)</b>	<b>Carrying amount as of December 31, 2015</b>
---------------------------	----------------------------	---------------------------	----------------------	--	--

					<b>(R\$ million)</b>	
Non-Derivative Financial Instruments (debt: Future principal and interest)	Portion of Foreign Highly Currency Probable – Real vs U.S. Monthly Dollar Export Revenues Spot Rate			January 2016 to November 2026	61,520	240,222

<b>Changes in the amounts of principal and interest</b>	<b>US\$</b>	<b>R\$ million</b>
Amounts designated as of December 31, 2014	50,858	135,088
Additional hedging relationships designated, designations revoked and hedging instruments re-designated	23,336	81,137
Exports affecting the statement of income	(5,401)	(17,704)
Principal repayments / amortization	(7,273)	(27,038)
Foreign exchange variation	–	68,739
Amounts designated as of December 31, 2015	61,520	240,222

The ratio of highly probable future exports to debt instruments for which a hedging relationship has been designated in future periods is set out below:

<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Average</b>
								<b>to</b>	
								<b>2026</b>	

Hedging instruments designated / Highly probable future exports (%)	82	83	80	78	71	61	57	55	49	60
---	----	----	----	----	----	----	----	----	----	----





A roll-forward schedule of cumulative foreign exchange losses recognized in other comprehensive income as of December 31, 2015 is set out below:

F-87

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**Exchange  
rate**

**Tax effect**

**Total**

Balance at January 1, 2015	(11,664)	3,966	(7,698)
----------------------------	----------	-------	---------

Recognized in shareholders' equity	(21,132)	7,185	(13,947)
------------------------------------	----------	-------	----------

Reclassified to the statement of income affecting profit or loss	2,004	(682)	1,322
---	-------	-------	-------

Reclassified to the statement of income for not concluded export	53	(18)	35
---	----	------	----

Balance at December 31, 2015	(30,739)	10,450	(20,289)
------------------------------	----------	--------	----------





Additional hedging relationships may be revoked or additional reclassification adjustments from equity to the statement of income may occur as a result of changes in forecast export prices and export volumes following a review in the Company's business plan. Based on a sensitivity analysis considering a US\$ 10/barrel decrease in Brent prices stress scenario, when compared to the Brent price projections in our most recent update of the 2015-2019 Business and Management Plan (*Plano de Negócios e Gestão – PNG*), a US\$ 416 reclassification adjustment from equity to the statement of income would occur.

A schedule of expected reclassification of cumulative foreign exchange losses recognized in other comprehensive income to the statement of income as of December 31, 2015 is set out below:

	<b>Consolidated</b>									
	<b>12.31.2015</b>									
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024 to 2026</b>	<b>Total</b>
Expected										
Realization	(3,727)	(4,301)	(4,453)	(3,942)	(3,312)	(3,198)	(3,276)	(2,308)	(2,222)	(30,739)

**b) Cash flow hedges involving swap contracts – Yen x Dollar**

The Company has a cross currency swap to fix in U.S. dollars the payments related to bonds denominated in Japanese yen and does not intend to settle these contracts before the maturity. The relationship between the derivative and the bonds was designated for the purpose of the cash flow hedge accounting.

**c) Sensitivity analysis for foreign exchange risk on financial instruments**

A sensitivity analysis is set out below, showing the probable scenario for foreign exchange risk on financial instruments, computed based on external data along with stressed scenarios (a 25% and a 50% change in the foreign exchange rates), except for assets and liabilities of foreign subsidiaries, when transacted in a currency equivalent to their respective functional currencies.

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

<b>Financial Instruments</b>	<b>Exposure at 12.31.2015</b>	<b>Risk</b>	<b>Probable Scenario (*)</b>	<b>Stressed Scenario</b>	<b>Stressed Scenario</b>
				<b>(Δ of 25%)</b>	<b>(Δ of 50%)</b>
Assets	5,433		202	1,358	2,716
Liabilities	(66,214)	Dollar/Real	(2,462)	(16,553)	(33,107)
Cash flow hedge on exports	61,520		2,288	15,380	30,760
	739		28	185	369
Liabilities (**)	(558)	Yen/Dollar	17	(140)	(279)
Assets	28	Euro/Real	-	7	14
Liabilities	(2,253)		(1)	(563)	(1,127)
	(2,225)		(1)	(556)	(1,113)
Assets	8,771	Euro/Dollar	(322)	2,193	4,386
Liabilities	(15,171)		556	(3,793)	(7,585)
	(6,400)		234	(1,600)	(3,199)
Assets	7	Pound	1	2	4
Liabilities	(26)	Sterling/Real	(2)	(6)	(13)
	(19)		(1)	(4)	(9)
Assets	2,332	Pound	45	583	1,166
Liabilities	(4,955)	Sterling/Dollar	(96)	(1,239)	(2,477)
	(2,623)		(51)	(656)	(1,311)
Assets	597	Peso/Dollar	66	149	298
Liabilities	(634)		(70)	(159)	(317)
	(37)		(4)	(10)	(19)
	(11,123)		222	(2,781)	(5,561)

(\*) On December 31, 2015, the probable scenario was computed based on the following risks: R\$ x U.S. Dollar - a 3.7% depreciation of the Real/ Japanese Yen x U.S. Dollar - a 2.9% depreciation of the Japanese Yen/ Peso x U.S. Dollar - a 12% depreciation of the Peso / Euro x U.S. Dollar: a 3.5% depreciation of the Euro / Pound Sterling x U.S. Dollar: a 1.9% appreciation of the Pound Sterling/ Real x Euro - a 0.1% appreciation of the Real / Real x Pound Sterling - 5.7% depreciation of the Real. Source: Focus and Bloomberg.

(\*\*) A portion of the foreign currency exposure is hedged by a cross-currency swap.

**33.3. Interest rate risk management**

The Company considers that interest rate risk does not create a significant exposure and therefore, preferably does not use derivative financial instruments to manage interest rate risk, except for specific situations encountered by certain subsidiaries of Petrobras.

### 33.4. Capital management

The Company's objectives when making its financial decisions is to achieve an adequate capital management and indebtedness level in order to safeguard its ability to continue as a going concern, adding value to its shareholders and investors. Its main sources of funding have been cash provided by its operating activities, debt issuance in the international capital markets, loan agreements with commercial banks and cash provided by asset disposals (divesting). The duration of the Company's debt matches the maturity of its capital expenditures (an average maturity of approximately 7 years).

Net debt is calculated as total debt (short-term debt and long-term debt) less cash, cash equivalents and government bonds and time deposits with maturities higher than three months. Adjusted EBITDA is calculated by adding back net finance income (expenses), income taxes, depreciation/amortization, share of earnings in equity-accounted investments and impairment charges. These measures are not defined by the International Financial Reporting Standards – IFRS (non-GAAP measures) and should neither be considered in isolation or as substitutes for profit, indebtedness and cash flow provided by operating activities as defined by the IFRS, nor be compared to those measures of other companies.

	<b>2015</b>	<b>2014</b>
Total debt (current and noncurrent)	126,216	132,158
Cash and cash equivalents	(25,058)	(16,655)
Government securities and time deposits (maturity of more than three months)	(779)	(9,302)
Net debt	100,379	106,201
Net debt/(net debt+shareholders' equity)	60%	48%
Adjusted EBITDA	22,760	24,966
Net debt/Adjusted EBITDA ratio	4.41	4.25

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Undertaking capital expenditures in the oil and gas industry is financial-capital intensive and involves long-term maturity. Thus cash used in investing activities may exceed cash provided by operating activities during certain periods. Cash provided by operating activities may be negatively affected if oil prices remain at the current level for a significant period of time. Thus the Company's financial ratios may be negatively affected during the period when there is no cash flows provided by the operations of its ongoing capital expenditures or when changes resulting from a revision of the Company's Business and Management Plan – BMP are being implemented.

In addition, the recently revised divestment plan for the 2015 to 2016 period (projecting divestments of US\$ 15.1 billion) is part of the Company's financial planning, aimed at reducing leverage, preserving cash and prioritizing capital expenditures, primarily in oil and gas production in Brazil in highly productive and profitable areas.

However, this divestment portfolio is dynamic and the occurrence of the transactions depend on business conditions, market conditions and the Company's continuing assessment of its businesses, due to these reasons the rating conditions for assets available for sale were not fulfilled as set out in note 4.12.

### **33.5. Credit risk**

Credit risk management in Petrobras aims at minimizing risk of not collecting receivables, financial deposits or collateral from third parties or financial institutions through efficient credit analysis, granting and management based on quantitative and qualitative parameters that are appropriate for each market segment in which the Company operates.

The commercial credit portfolio is broad and diversified and comprises clients from the domestic market and from foreign markets. Credit granted to financial institutions is related to collaterals received, cash surplus invested and derivative financial instruments. It is spread among "investment grade" international banks rated by international rating agencies and highly rated Brazilian banks.

#### **33.5.1. Credit quality of financial assets**

##### **a) Trade and other receivables**

Most of the company's customers have no credit agency ratings. Thus, credit commissions assess creditworthiness and define credit limits, which are regularly monitored, based on the customer's main activity, commercial relationship and credit history with Petrobras, solvency,

financial situation and external market assessment of the customer.

**b) Other financial assets**

Credit quality of cash and cash equivalents, as well as marketable securities is based on external credit ratings provided by Standard & Poor's, Moody's and Fitch. The credit quality of those financial assets, that are neither past due nor have been impaired, are set out below:

	<b>Cash and cash equivalents</b>		<b>Marketable securities</b>	
	<b>2015</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>
AAA	-	21	-	-
AA	567	100	-	-
A	18,947	8,145	-	20
BBB	3,601	1,501	67	91
BB	167	-	-	-
B	7	-	-	-
AAA.br	1,688	5,221	779	9,281
AA.br	11	926	-	-
Other ratings	70	741	22	40
	25,058	16,655	868	9,432

F-90

---

**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)***33.6. Liquidity risk**

Liquidity risk is represented by the possibility of a shortage of cash or other financial assets in order to settle the Company's obligations on the agreed dates and is managed by the Company based on policies such as: centralized cash management, in order to optimize the level of cash and cash equivalents held and to reduce working capital; a minimum cash level to ensure that cash needed for investments and short-term obligations is met even in adverse market conditions; increasing the number of investors in the domestic and international markets through funding opportunities, preserving a strong presence in the international capital markets and searching for new funding sources, including new markets and financial products.

During 2015, the Company used traditional funding sources (export credit agencies – ECAs, banking market, capital markets and development banks) to obtain the necessary funding to repay debt and fund its capital expenditures. In 2016 the Company expects to count on traditional funding sources, other financing options and on proceeds from the divestment program, in order to meet its funding needs.

A maturity schedule of the Company's finance debt (undiscounted), including face value and interest payments is set out following:

<b>Maturity</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021 and thereafter</b>	<b>Balance at December 31, 2015</b>	<b>Balance at December 31, 2014</b>
Principal	13,000	11,450	16,166	22,672	15,449	48,617	127,354	133,358
Interest	6,621	6,014	5,585	4,624	3,404	32,790	59,038	46,346
Total	19,621	17,464	21,751	27,296	18,853	81,407	186,392	179,704

**33.7. Insurance (unaudited)**

The Company's insurance strategy involves acquiring insurance to cover risks that may produce material impacts and also to cover risks that are subject to compulsory insurance coverage (pursuant to legal or contractual requirements). The remaining risks are self-insured and Petrobras intentionally assumes the entire risk by abstaining from contracting insurance. The Company assumes a significant portion of its risk, by entering into insurance policies that have deductibles up to the equivalent to US\$ 25.

The Company's risk assumptions for insurance are not part of the audit scope of the financial statements audit and therefore were not examined by the Company's Independent Registered Public Accounting Firm.

The main information concerning the insurance coverage outstanding at December 31, 2015 is set out below:

<b>Assets</b>	<b>Types of coverage</b>	<b>Amount insured (*)</b>
	Fire, operational risks and engineering risks	
Facilities, equipment inventory and products inventory		182,746
Tankers and auxiliary vessels	Hulls	3,800
Fixed platforms, floating production systems and offshore drilling units	Oil risks	38,741
Total		225,287

(\*) The Company has corrected figures that were incorrectly transcribed in the Form 6-K furnished by the Company to the SEC on March 23, 2016.

Petrobras does not have loss of earnings insurance or insurance related to well control, automobiles and pipeline networks in Brazil.

#### **34. Fair value of financial assets and liabilities**

Fair values are determined based on market prices, when available, or, in the absence thereof, on the present value of expected future cash flows. The fair values of cash and cash equivalents, short term debt and other non-current assets and liabilities are the same as or do not differ significantly from their carrying amounts.

F-91

---



**Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The hierarchy of the fair values of the financial assets and liabilities, recorded on a recurring basis, is set out below:

- Level 1 inputs: are the most reliable evidence of fair value, quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2 inputs: are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 inputs: are unobservable inputs for the asset or liability.

	<b>Fair value measured based on</b>			<b>Total fair value recorded</b>
	<b>Level I</b>	<b>Level II</b>	<b>Level III</b>	
<b>Assets</b>				
Marketable securities	785	-	-	785
Commodity derivatives	48	-	-	48
Foreign currency derivatives	-	6.3	-	6.3
Balance at December 31, 2015	833	6.3	-	839.3
Balance at December 31, 2014	2,781.7	2	-	2,783.7
<b>Liabilities</b>				
Foreign currency derivatives	-	(16)	-	(16)
Interest derivatives	-	(17)	-	(17)
Balance at December 31, 2015	-	(33)	-	(33)
Balance at December 31, 2014	-	(42)	-	(42)

There are no material transfers between levels.

The estimated fair value for the Company's long term debt as of December 31, 2015, computed based on the prevailing market rates is set out in note 17.

**35. Subsequent events**

### **Revision on governance and management model**

On January 28, 2016, the Company presented its new organization structure and its new governance and management model. The revision of the model has been made to align the organization with the new conditions faced by the oil and gas industry and to prioritize profitability and capital discipline. The new model does not propose discontinuing operations, however, it does consider merge of operations.

Accordingly, the Company has been reviewing its current business segment structure in order to improve management business analysis, as well as decision-making regarding investments and resources allocation.

### **EIG Claim Involving Sete Brasil**

On February 23, 2016, EIG Management Company (EIG) and affiliates filed a complaint against Petrobras before the federal court in Washington, DC, alleging that the Company had committed fraud by inducing plaintiffs to invest in Sete Brazil Participações SA ("Sete"), through communications that failed to disclose the alleged corruption scheme in which the Company and Sete were allegedly involved and that plaintiffs' investments in Sete allowed Petrobras to perpetuate and expand the corruption scheme.

### **Line of credit**

On February 26, 2016, Petrobras signed a term sheet with the China Development Bank -CDB, for a financing of US\$10 billion.

## **Petróleo Brasileiro S.A. – Petrobras**

Notes to the financial statements

*(Expressed in millions of US Dollars, unless otherwise indicated)*

The parties are also negotiating financing contracts including an agreement to supply crude oil to Chinese companies with similar terms to the contracts executed by them in 2009.

### **Contracts regarding the sale of its 20% interest in the concessions of Bijupirá and Salema**

On February 26, 2016, Petro Rio S.A. terminated the sales contracts signed with the Company on July 1, 2015, regarding the sale of the 20% interest in the concessions of Bijupirá and Salema (BJS) and in the Dutch joint operation BJS Oil Operations B.V. (BJSOO BV). Therefore, Petrobras maintains its 20% stake in those fields, in partnership with Shell, which owns the remaining 80% and operates the fields.

According to the contractual conditions, with the approval of CADE on August 10, 2015, the Company received the amount of US\$ 5 as an advance, which was returned in March 2016.

### **Measures of incentive to the exploration and production of oil and natural gas**

On March 3, 2016, the *Conselho Nacional de Política Energética* - CNPE enacted the Resolution No. 2 which authorizes the *Agência Nacional do Petróleo, Gás Natural e Biocombustíveis* – ANP to extend the periods of the “Round Zero” concession agreements, establishes guidelines for this process, as well as determines that the ANP must notify operators whose fields have not been producing for the last six months, applying for a response to the production restart, transfers of rights, or return the fields. The resolution also extends the special customs procedure of goods for the research and exploitation of oil and gas activities, *REPETRO*, and requests to complete the studies for proposing the parameters of hiring under the production sharing model in unitized areas in the Pre-Salt.

### **Financing Agreement with ICBC Leasing (sale and leaseback)**

On March 8, 2016, the Company received the amount of US\$ 1 billion related to sale and leaseback agreement entered into by Petrobras and ICBC Leasing (Industrial and Commercial Bank of China Leasing), with respect to P-52 platform, as announced on October 13, 2015.

P-52 was sold to the bank and the debt will be settled by lease payments. The ownership will be transferred back to the Company by the of lease term. The transaction has a 10 year maturity.

### **Voluntary Separation Incentive Program – PIDV**

In April 1, 2016, the Company announced a new voluntary separation incentive program (2016 PIDV) designed to contribute to the achievement of the goals set out in our Business and Management Plan.

The 2016 PIDV is open to all our employees from April 11, 2016 up to August 31, 2016. Provisions for charges will be recognized through such period according to the enrollment of our workforce to this program. The effective cost to implement the 2016 PIDV and the exact result of this cost saving measure will depend on a number of variables.

### **36. Information Related to Guaranteed Securities Issued by Subsidiaries**

#### **36.1. Petrobras Global Finance B.V. (PGF)**

Petróleo Brasileiro S.A. - Petrobras fully and unconditionally guarantees the debt securities issued by Petrobras Global Finance B.V. (PGF), a 100-percent-owned finance subsidiary of Petrobras. There are no significant restrictions on the ability of Petrobras to obtain funds from PGF.

## **Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)*

### **Supplementary information on Oil and Gas Exploration and Production (unaudited)**

In accordance with Codification Topic 932 - Extractive Activities – Oil and Gas, this section provides supplemental information on oil and gas exploration and production activities of the Company. The information included in items (i) through (iii) provides historical cost information pertaining to costs incurred in exploration, property acquisition and development, capitalized costs and results of operations. The information included in items (iv) and (v) presents information on Petrobras' estimated net proved reserve quantities, standardized measure of estimated discounted future net cash flows related to prove reserves, and changes in estimated discounted future net cash flows.

Beginning in 1995, the Federal Government of Brazil undertook a comprehensive reform of the country's oil and gas regulatory system. On November 9, 1995, the Brazilian Constitution was amended to authorize the Federal Government to contract with any state or privately owned company to carry out the activities related to the upstream and downstream segments of the Brazilian oil and gas sector. This amendment eliminated Petrobras' effective monopoly. The amendment was implemented by the Oil Law, which liberated the fuel market in Brazil beginning January 1, 2002.

The Oil Law established a regulatory framework ending Petrobras' exclusive agency and enabling competition in all aspects of the oil and gas industry in Brazil. As provided in the Oil Law, Petrobras was granted the exclusive right for a period of 27 years to exploit the petroleum reserves in all fields where the Company had previously commenced production. However, the Oil Law established a procedural framework for Petrobras to claim exclusive exploratory (and, in case of success, development) rights for a period of up to three years with respect to areas where the Company could demonstrate that it had "established prospects". To perfect its claim to explore and develop these areas, the Company had to demonstrate that it had the requisite financial capacity to carry out these activities, alone or through financing or partnering arrangements.

As of December 31, 2015, the Company operates in South America, which includes Argentina, Colombia and Bolivia; North America, which includes Mexico and the United States of America; and Turkey (others). The equity-accounted investments are comprised of the operations of Petrobras Oil and Gas B.V. (PO&G) in Africa, mainly Nigeria, as well as Venezuelan companies involved in exploration and production activities. However, reserves are estimated only in Argentina, United States, Nigeria and Venezuela.

F-94

---

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)***i) Capitalized costs relating to oil and gas producing activities**

The following table summarizes capitalized costs for oil and gas exploration and production activities with the related accumulated depreciation, depletion and amortization, and asset retirement obligation assets:

	<b>Consolidated entities</b>					<b>Total</b>	<b>Total</b>	<b>Equity</b>
	<b>Brazil</b>	<b>Abroad South</b>	<b>North</b>	<b>Africa</b>	<b>Others</b>			
December 31, 2015								
Unproved oil and gas properties	6,720	133	396	–	–	529	7,249	–
Proved oil and gas properties	70,822	2,016	4,107	–	–	6,123	76,945	2,899
Support Equipment	70,931	1,066	65	–	4	1,135	72,066	88
Gross Capitalized costs	148,473	3,215	4,568	–	4	7,787	156,260	2,987
Depreciation, depletion and amortization	(40,763)	(2,037)	(1,574)	–	(4)	(3,615)	(44,378)	(1,282)
Net capitalized costs	107,710	1,178	2,994	–	–	4,172	111,882	1,705
December 31, 2014								
Unproved oil and gas properties	9,298	72	673	–	–	745	10,043	9
Proved oil and gas properties	96,520	2,007	4,247	–	–	6,254	102,774	4,542
Support Equipment	79,497	1,181	78	–	3	1,262	80,759	26
Gross Capitalized costs	185,315	3,260	4,998	–	3	8,261	193,576	4,577
Depreciation, depletion and amortization	(46,691)	(1,753)	(1,274)	–	(3)	(3,030)	(49,721)	(1,819)
Net capitalized costs	138,624	1,507	3,724	–	–	5,231	143,855	2,758
December 31, 2013								

Unproved oil and gas properties	21,261	826	685	22	—	1,533	22,794	—
Proved oil and gas properties	82,389	2,410	5,907	—	—	8,317	90,706	3,972
Support Equipment	81,436	360	(274)	(15)	4	75	81,511	1
Gross Capitalized costs	185,086	3,596	6,319	7	4	9,926	195,012	3,973
Depreciation, depletion and amortization	(44,626)	(2,045)	(948)	—	(4)	(2,997)	(47,623)	(1,455)
Net capitalized costs	140,460	1,551	5,370	7	—	6,929	147,389	2,518

## ii) Costs incurred in oil and gas property acquisition, exploration and development activities

Costs incurred are summarized below and include both amounts expensed and capitalized:

	Consolidated entities					Total	Total	Equity Method Investees
	Brazil	South America	North America	Africa (*)	Others			
December 31, 2015								
Acquisition costs:								
Proved	—	—	—	—	—	—	—	—
Unproved	—	—	—	—	—	—	—	—
Exploration costs	3,266	59	83	—	—	142	3,408	10
Development costs	15,536	451	397	—	—	848	16,384	431
Total	18,802	510	480	—	—	990	19,792	441
December 31, 2014								
Acquisition costs:								
Proved	—	89	—	—	—	89	89	—
Unproved	54	—	—	—	—	—	54	—
Exploration costs	5,455	122	135	15	—	272	5,727	—
Development costs	18,158	546	418	—	—	964	19,122	638
Total	23,667	757	552	15	—	1,325	24,992	638
December 31, 2013								
Acquisition costs:								
Proved	—	—	—	—	—	—	—	—
Unproved	2,791	—	—	—	—	—	2,791	—
Exploration costs	6,814	183	397	1	1	582	7,396	—
Development costs	16,732	673	1,138	282	2	2,095	18,827	237



Total	26,337	856	1,535	283	3	2,677	29,014	237
-------	--------	-----	-------	-----	---	-------	--------	-----

F-95

---

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**(iii) Results of operations for oil and gas producing activities**

The Company's results of operations from oil and gas producing activities for the years ended December 31, 2015, 2014 and 2013 are shown in the following table. The Company transfers substantially all of its Brazilian crude oil and gas production to the Refining, Transportation & Marketing segment in Brazil. The internal transfer prices calculated by the Company's model may not be indicative of the price the Company would have realized had this production been sold in an unregulated spot market. Additionally, the prices calculated by the Company's model may not be indicative of the future prices to be realized by the Company. Gas prices used are those set out in contracts with third parties.

Production costs are lifting costs incurred to operate and maintain productive wells and related equipment and facilities, including operating employees' compensation, materials, supplies, fuel consumed in operations and operating costs related to natural gas processing plants.

Exploration expenses include the costs of geological and geophysical activities and projects without economic feasibility. Depreciation and amortization expenses relate to assets employed in exploration and development activities. In accordance with Codification Topic 932 – Extractive Activities – Oil and Gas, income taxes are based on statutory tax rates, reflecting allowable deductions. Interest income and expense are excluded from the results reported in this table.

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)***(iii) Results of operations for oil and gas producing activities**

	<b>Consolidated entities Abroad</b>						<b>Equity Method Investees</b>	
	<b>Brazil</b>	<b>South America</b>	<b>North America</b>	<b>Africa</b>	<b>Others</b>	<b>Total</b>	<b>Total</b>	<b>Investees</b>
December 31, 2015								
Net operation revenues:								
Sales to third parties	2,867	303	590	–	–	893	3,760	561
Intersegment	30,951	969	–	–	–	969	31,920	19
Production costs	(17,023)	(556)	(189)	–	–	(745)	(17,768)	(209)
Exploration expenses	(1,582)	(18)	(311)	–	–	(329)	(1,911)	(30)
Depreciation, depletion and amortization	(7,403)	(301)	(246)	–	–	(547)	(7,950)	(187)
Impairment of oil and gas properties	(9,165)	(207)	(458)	–	–	(665)	(9,830)	(278)
Other operating expenses	(2,932)	47	(91)	–	(160)	(204)	(3,136)	(43)
Results before income tax expenses	(4,287)	237	(705)	–	(160)	(628)	(4,915)	(167)
Income tax expenses	1,458	(77)	1	–	16	(60)	1,398	(84)
Results of operations (excluding corporate overhead and interest costs)	(2,829)	160	(704)	–	(144)	(688)	(3,517)	(251)
December 31, 2014								
Net operation revenues:								
Sales to third parties	500	847	919	–	–	1,766	2,266	676
Intersegment	65,116	1,234	–	–	–	1,234	66,350	1,394

## Edgar Filing: PETROBRAS - PETROLEO BRASILEIRO SA - Form 20-F

Production costs	(27,397)	(998)	(227)	–	–	(1,225)	(28,622)	(579)
Exploration expenses	(2,882)	(28)	(142)	(15)	–	(185)	(3,067)	(280)
Depreciation, depletion and amortization	(7,675)	(352)	(558)	–	–	(910)	(8,585)	(174)
Impairment of oil and gas properties	(2,133)	(87)	(1,585)	(6)	–	(1,678)	(3,811)	(74)
Other operating expenses	(2,827)	1,059	(112)	2	113	1,063	(1,764)	(8)
Income before income tax expenses	22,702	1,675	(1,705)	(20)	113	64	22,766	954
Income tax expenses	(7,719)	(490)	(4)	–	17	(477)	(8,196)	(653)
Results of operations (excluding corporate overhead and interest costs)	14,983	1,186	(1,709)	(20)	130	(413)	14,570	301
December 31, 2013								
Net operation revenues:								
Sales to third parties	1,114	1,033	513	206	–	1,752	2,866	546
Intersegment	67,096	1,708	–	674	–	2,382	69,478	762
Production costs	(26,465)	(1,420)	(177)	(65)	–	(1,663)	(28,128)	(197)
Exploration expenses	(2,784)	(61)	(88)	(28)	(3)	(180)	(2,964)	(2)
Depreciation, depletion and amortization	(7,814)	(519)	(322)	(89)	–	(931)	(8,745)	(263)
Impairment of oil and gas properties	(4)	1	(14)	(560)	–	(573)	(577)	–
Other operating expenses	(1,345)	(256)	(75)	(50)	1,748	1,367	22	–
Income before income tax expenses	29,798	486	(162)	86	1,744	2,154	31,952	847
Income tax expenses	(10,131)	(141)	(2)	(367)	(1)	(510)	(10,642)	(348)
Results of operations (excluding corporate overhead and interest costs)	19,667	345	(164)	(281)	1,744	1,644	21,311	498

**(iv) Reserve quantities information**

The Company's estimated net proved oil and gas reserves and changes thereto for the years 2015, 2014 and 2013 are shown in the following table. Proved reserves are estimated by the Company's reservoir geengineers in accordance with the reserve definitions prescribed by the Securities and Exchange Commission.

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

F-97

---

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)*

Developed oil and gas reserves are reserves of any category that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is done by means not involving a well.

In some cases, substantial new investments in additional wells and related facilities will be required to recover these proved reserves. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of reserves are subject to change as additional information becomes available.

**(iv) Reserve quantities information**

A summary of the annual changes in the proved reserves of oil is as follows (in millions of barrels):

	<b>Consolidated</b>							<b>Equity Method Investees</b>
	<b>Brazil</b>	<b>Abroad **</b>		<b>Total</b>	<b>Synthetic Oil</b>	<b>Total</b>		
<b>Proved developed and undeveloped reserves</b>		<b>South America</b>	<b>North America</b>	<b>Africa</b>				
Reserves at December 31, 2012	10,539.2	175.4	74.0	140.2	389.6	8.3	10,937.1	24.3
Transfers by loss of control*	–	–	–	(140.2)	(140.2)	–	(140.2)	140.2
Revisions of previous estimates	(110.0)	13.4	21.9	–	35.4	1.3	(73.4)	1.8
Extensions and discoveries	818.3	–	33.0	–	33.0	–	851.4	–
Improved Recovery	124.2	–	–	–	–	–	124.2	–
Sales of reserves	(42.3)	–	(1.5)	–	(1.5)	–	(43.8)	(65.4)
	(671.0)	(22.8)	(4.3)	–	(27.1)	(0.8)	(698.9)	(16.5)

Production for the year									
Reserves at December 31, 2013	10,658.4	166.0	123.1	—	289.2	8.8	10,956.4	84.5	
Revisions of previous estimates	629.3	(3.2)	5.3	—	2.1	0.2	631.6	(1.1)	
Extensions and discoveries	267.7	3.0	1.6	—	4.6	—	272.3	—	
Improved Recovery	—	0.5	—	—	0.5	—	0.5	—	
Sales of reserves	—	(104.4)	(0.1)	—	(104.5)	—	(104.5)	—	
Purchases of reserves	—	22.9	—	—	22.9	—	22.9	—	
Production for the year	(704.6)	(18.3)	(10.0)	—	(28.3)	(1.1)	(734.0)	(11.3)	
Reserves at December 31, 2014	10,850.9	66.5	119.9	—	186.5	7.9	11,045.1	72.1	
Revisions of previous estimates	(1,968.9)	(3.5)	(18.1)	—	(21.6)	0.1	(1,990.4)	3.1	
Extensions and discoveries	407.1	4.8	—	—	4.8	—	411.9	—	
Improved Recovery	0.4	0.7	—	—	0.7	—	1.1	16.2	
Sales of reserves	(2.3)	(4.5)	—	—	(4.5)	—	(6.8)	—	
Production for the year	(743.1)	(11.7)	(11.2)	—	(22.8)	(1.0)	(767.0)	(10.9)	
Reserves at December 31, 2015	8,544.1	52.3	90.6	—	142.9	6.9	8,693.9	80.4	

(\*) Amounts transferred from consolidated entities to equity-method entities, as the Company ceased to consolidate PO&G.

(\*\*) In 2013 includes 105 million barrels related to assets classified as held for sale. Apparent differences in the sum of the numbers are due to rounding off.

Bolivian proved reserves are not included due to restrictions determined by Bolivian Constitution.

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)***(iv) Reserve quantities information**

A summary of the annual changes in the proved reserves of natural gas is as follows (in billions of cubic feet):

	<b>Consolidated</b>							<b>Equity Method Investees</b>
	<b>Brazil</b>	<b>Abroad **</b>			<b>Total</b>	<b>Synthetic Gas</b>	<b>Total</b>	
<b>Proved developed and undeveloped reserves</b>		<b>South America</b>	<b>North America</b>	<b>Africa</b>				
Reserves at December 31, 2012	10,344.6	1,083.7	67.7	45.5	1,196.9	13.3	11,554.8	47.8
Transfers by loss of control*	–	–	–	(45.5)	(45.5)	–	(45.5)	45.5
Revisions of previous estimates	(291.2)	75.2	2.6	–	77.8	(0.1)	(213.5)	(8.0)
Extensions and discoveries	1,113.0	–	80.4	–	80.4	–	1,193.4	–
Improved Recovery	916.0	–	–	–	–	–	916.0	–
Sales of reserves	(17.3)	–	(13.4)	–	(13.4)	–	(30.7)	(22.8)
Purchases of reserves	0.4	–	–	–	–	–	0.4	–
Production for the year	(773.8)	(100.4)	(4.4)	–	(104.8)	(1.4)	(880.0)	(0.6)
Reserves at December 31, 2013	11,291.7	1,058.5	132.9	0.0	1,191.4	11.8	12,494.8	61.9
Transfers by loss of control*	–	–	–	–	–	–	–	–
Revisions of previous estimates	468.0	25.5	46.1	–	71.6	0.1	539.7	(14.4)
	216.0	42.1	6.0	–	48.1	–	264.1	–



Extensions and discoveries								
Improved Recovery	–	10.8	–	–	10.8	–	10.8	–
Sales of reserves	–	(351.7)	(0.1)	–	(351.8)	–	(351.8)	–
Purchases of reserves	–	47.1	–	–	47.1	–	47.1	–
Production for the year	(805.4)	(101.5)	(4.9)	–	(106.4)	(1.4)	(913.2)	(0.6)
Reserves at December 31, 2014	11,170.3	730.8	180.0	0.0	910.8	10.6	12,091.5	46.9
Transfers by loss of control*	–	–	–	–	–	–	–	–
Revisions of previous estimates	(1,178.3)	16.8	(17.0)	–	(0.2)	0.2	(1,178.3)	(13.1)
Extensions and discoveries	417.6	74.6	–	–	74.6	–	492.2	–
Improved Recovery	0.2	27.7	–	–	27.7	–	27.9	–
Sales of reserves	(1.3)	(90.2)	–	–	(90.2)	–	(91.5)	–
Purchases of reserves	–	–	–	–	–	–	–	–
Production for the year	(820.8)	(79.2)	(24.5)	–	(103.7)	(1.4)	(925.9)	(0.3)
Reserves at December 31, 2015	9,587.7	680.5	138.5	–	819.1	9.3	10,416.1	33.5

\*Amounts transferred from consolidated entities to equity-method entities, as the Company ceased to consolidate PO&G.

\*\* In 2013 includes 363 billion cubic feet related to assets classified as held for sale.

Apparent differences in the sum of the numbers are due to rounding off.

Bolivian proved reserves are not included due to restrictions determined by Bolivian Constitution.

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)*

**(iv) Reserve quantities information**

**2015**

**2014**

**2013**

<b>Crude Oil</b>	<b>Synthetic Oil</b>	<b>Natural Gas</b>	<b>Synthetic Gas</b>	<b>Crude Oil</b>	<b>Synthetic Oil</b>	<b>Natural Gas</b>	<b>Synthetic Gas</b>	<b>Crude Oil</b>	<b>Synthetic Oil</b>	<b>Natural Gas</b>	<b>Synthetic Gas</b>	<b>Crude Oil</b>	<b>Synthetic Oil</b>	<b>Natural Gas</b>	<b>Synthetic Gas</b>
------------------	----------------------	--------------------	----------------------	------------------	----------------------	--------------------	----------------------	------------------	----------------------	--------------------	----------------------	------------------	----------------------	--------------------	----------------------

**(millions of  
barrels)**

**(billions of cubic (millions of  
feet) barrels)**

**(billions of cubic (millions  
feet) barrels)**

Net proved  
developed  
reserves:

Consolidated  
Entities

Brazil

4,266.56.9

5,320.5 9.3

7,002.77.9

6,661.0 10.6

6,509.38

South America	39.7	–	366.3	–	52.0	–	358.2	–	86.0	–
---------------	------	---	-------	---	------	---	-------	---	------	---



North America	53.6	–	122.5	–	63.6	–	146.2	–	46.2	–
---------------	------	---	-------	---	------	---	-------	---	------	---

Abroad

93.4

–

488.8

–

115.6

–

504.3

–

132.2

–

Total  
Consolidated  
Entities

4,359.86.9

5,809.3 9.3

7,118.37.9

7,165.4 10.6

6,641.68

Nonconsolidated  
Entities

South America	6.6	–	8.0	–	9.4	–	15.7	–	12.4	–
---------------	-----	---	-----	---	-----	---	------	---	------	---

Africa	28.0	-	10.4	-	30.8	-	14.4	-	37.3	-
--------	------	---	------	---	------	---	------	---	------	---

Abroad	34.7	–	18.4	–	40.2	–	30.1	–	49.8	–
--------	------	---	------	---	------	---	------	---	------	---

Total Nonconsolidated Entities	34.7	–	18.4	–	40.2	–	30.1	–	49.8	–
--------------------------------------	------	---	------	---	------	---	------	---	------	---



Total Consolidated and Nonconsolidated Entities	4,394.56.9	5,827.7 9.3	7,158.57.9	7,195.5 10.6	6,691.48
---	------------	-------------	------------	--------------	----------

Net proved  
undeveloped  
reserves:Consolidated  
Entities

Brazil	4,277.7	–	4,267.2	–	3,848.2	–	4,509.2	–	4,149.1	–	4,712.7	–
South America	12.5	–	314.2	–	14.6	–	372.5	–	80.1	–	690.1	–
North America	37.0	–	16.0	–	56.4	–	33.8	–	77.0	–	123.1	–
Abroad	49.5	–	330.3	–	71.0	–	406.3	–	157.1	–	813.2	–

Total Consolidated  
Entities

	4,327.2	–	4,597.5	–	3,919.2	–	4,915.5	–	4,306.2	–	5,525.9	–
--	---------	---	---------	---	---------	---	---------	---	---------	---	---------	---

Nonconsolidated  
Entities

South America	7.9	–	8.9	–	8.6	–	11.9	–	8.8	–	26.4	–
Africa	37.8	–	6.2	–	23.3	–	4.9	–	25.9	–	4.9	–
Abroad	45.7	–	15.1	–	31.9	–	16.8	–	34.7	–	31.3	–

## Total

Nonconsolidated  
Entities

	45.7	–	15.1	–	31.9	–	16.8	–	34.7	–	31.3	–
--	------	---	------	---	------	---	------	---	------	---	------	---

Total Consolidated  
andNonconsolidated  
Entities

	4,372.9	–	4,612.6	–	3,951.1	–	4,932.3	–	4,340.8	–	5,557.2	–
--	---------	---	---------	---	---------	---	---------	---	---------	---	---------	---

Apparent differences in the sum of the numbers are due to rounding off.

Bolivian proved reserves are not included due to restrictions determined by Bolivian Constitution.

**Petróleo Brasileiro S.A. – Petrobras**

Supplementary information on Oil and Gas Exploration and Production (unaudited)

*(Expressed in millions of US Dollars, unless otherwise indicated)***(v) Standardized measure of discounted future net cash flows relating to proved oil and gas quantities and changes therein**

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of Codification Topic 932 – Extractive Activities – Oil and Gas. Estimated future cash inflows from production in Brazil are computed by applying the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. Future price changes are limited to those provided by contractual arrangements in existence at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on year-end cost indications, assuming continuation of year-end economic conditions. Estimated future income taxes (including future social contributions on net income - *CSLL*) are calculated by applying appropriate year-end statutory tax rates. The amounts presented as future income taxes expenses reflect allowable deductions considering statutory tax rates. Discounted future net cash flows are calculated using 10% mid-period discount factors. This discounting requires a year-by-year estimate of when the future expenditures will be incurred and when the reserves will be produced.

The valuation prescribed under Codification Topic 932 – Extractive Activities – Oil and Gas requires assumptions as to the timing and amount of future development and production costs. The calculations are made as of December 31 each year and should not be relied upon as an indication of Petrobras' future cash flows or the value of its oil and gas reserves.

	<b>Consolidated entities Abroad**</b>					<b>Equity</b>	
	<b>Brazil</b>	<b>South America</b>	<b>North America</b>	<b>Africa</b>	<b>Total</b>	<b>Total</b>	<b>Method Investees</b>
As of December 31, 2015							
Future cash inflows	462,364	6,541	4,720	–	11,261	473,625	3,942
Future production costs	(256,130)	(3,165)	(2,684)	–	(5,849)	(261,979)	(1,404)
Future development costs	(65,449)	(1,056)	(992)	–	(2,048)	(67,497)	(1,228)
Future income tax expenses	(61,408)	(527)	(23)	–	(550)	(61,958)	(349)
	79,377	1,793	1,021	–	2,814	82,191	961

Undiscounted future net cash flows 10 percent midyear annual discount for timing of estimated cash flows*	(36,608)	(588)	(148)	—	(736)	(37,344)	(449)
Standardized measure of discounted future net cash flows As of December 31, 2014	42,769	1,205	873	—	2,078	44,847	512
Future cash inflows	1,080,516	7,164	11,334	—	18,498	1,099,014	6,282
Future production costs	(469,252)	(3,743)	(3,687)	—	(7,430)	(476,682)	(1,904)
Future development costs	(70,098)	(1,195)	(2,351)	—	(3,547)	(73,644)	(1,613)
Future income tax expenses	(188,740)	(618)	(408)	—	(1,026)	(189,766)	(920)
Undiscounted future net cash flows 10 percent midyear annual discount for timing of estimated cash flows*	352,427	1,608	4,888	—	6,495	358,922	1,846
Standardized measure of discounted future net cash flows As of December 31, 2013	173,707	1,082	3,306	—	4,388	178,094	1,292
Future cash inflows	1,134,383	16,770	12,071	—	28,841	1,148,794	8,724
Future production costs	(469,442)	(8,742)	(3,484)	—	(12,226)	(472,233)	(3,051)
Future development costs	(72,675)	(2,146)	(2,795)	—	(4,942)	(66,229)	(1,927)
Future income tax expenses	(205,938)	(1,693)	(169)	—	(1,862)	(209,434)	(1,221)
Undiscounted future net cash flows	386,328	4,189	5,622	—	9,811	400,898	2,524

10 percent midyear annual discount for timing of estimated cash flows*	(197,760)	(1,435)	(2,288)	–	(3,723)	(209,434)	(820)
Standardized measure of discounted future net cash flows	188,569	2,754	3,335	–	6,088	191,464	1,704

\*Semiannual capitalization

\*\*In 2013 includes the amount of US\$ 1,758 related to assets classified as held for sale. Bolivian proved reserves are not included due to restrictions determined by Bolivian Constitution.

F-101

---

